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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

08/487,526

06/07/95

HARVEY

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ART UNIT

PAPER NUMBER

EXAMINER

2731

DATE MAILED:

01/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



Office Action Summary

Application No. **08/487,526**

No. Applicanti

HARVEY et al

Examiner

William Luther

Group Art Unit 2731



Responsive to communication(s) filed on Mar 8, 1999		
☐ This action is FINAL.		
☐ Since this application is in condition for allowance except for formal matters in accordance with the practice under Ex parte Quay/035 C.D. 11; 453 O.0		
A shortened statutory period for response to this action is set to expire longer, from the mailing date of this communication. Failure to respond within application to become abandoned. (35 U.S.C. § 133). Extensions of time may 37 CFR 1.136(a).	the period for response will cause the	
Disposition of Claim		
	is/are pending in the applicat	
Of the above, claim(s)	is/are withdrawn from consideration	
Claim(s)	is/are allowed.	
	is/are rejected.	
Claim(s)	is/are objected to.	
☐ Claims	_ are subject to restriction or election requirement.	
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on		
Attachment(s) Notice of References Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Notice of Informal Patent Application, PTO-152		
SEE OFFICE ACTION ON THE FOLLOWING PAGES		

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Applicants are expected to comply fully with 37 C.F.R. 1.111 & 1.119, and M.P.E.P. 714.07, in response to this office action.

Application no.	Date	Status
-the instant disclosure, 08/487,526, (*526) is	filed <i>6</i> /7/95	pending;
-a continuation of 08/113,329 ('329)	filed 8/30/93	pending;
-which is a continuation of 08/056,501	filed 5/3/93	now patent 5,335,277; ('277);
-which is a continuation of 07/849,226	filed 3/10/92	now patent 5,233,654; ('654);
-which is a continuation of 07/588,126	filed 9/25/90	now patent 5,109,414; ('414);
-which is a continuation of 07/096,096 ('87 C.I.P.) (This C.I.P. did not specifically include or expressly incorporate by reference application 06/829,531)	filed 9/11/86	now patent 4,965,825; ('825)
-which is a continuation-in-part of 06/829,531	filed 2/14/86	now patent 4,704,725; (*725)
-which is a continuation of 06/317,510 ('81)	filed 11/3/81	now patent 4,694,490. (*490)

1. All remarks, of paper no. 25 received 3/8/99, have been fully considered but are deemed moot in view of the new ground(s) of rejection. Pending claims 2-65 are addressed within the context of the rejections below.

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2. It is noted that Applicants have alleged, by paper no. 25, that claims from co-pending applications 08/437,044 ('044) and 08/487,408 ('408) correspond to newly added claims of the instant disclosure '526. Therefore, the file wrapper histories of '044 and '408 are referenced when relevant.

Moreover, co-pending applications 08/468,641 ('641) and 08/471,024 ('024) are referenced when relevant. Applicants have alleged by co-pending application 08/470,571 ('571) that claims from '641 and '024 correspond to '571 claims. And Applicants have identified the very same '81 Wall Street Week embodiment as support for both pending claims '526 as well as for the '571 claims (for example; see Appendix B which Applicants titled "MULT 81 Specification Support col 3 with respect to lines 45-48 "When the "Wall Street Week" transmission begins..").

Applicants have alleged:

Applicants...point out that the....subject application claim priority back to application filed November 3, 1981, ...Consequently, the Applicants will demonstrate disclosure only with respect to the "81 case"...

Page 22 first paragraph, paper no. 12 of '641.

The present application claims priority under 35 U.S.C. 120...Consequently, the Applicants will demonstrate disclosure only with respect to the '81 case...

Page 20 second paragraph, paper no. 12 of '024.

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However, when a written description rejection has been made, the law unambiguously requires that Applicants demonstrate 'full support' with respect to the instant '526 disclosure whether or not there is a priority claim under 35 U.S.C. 120.

Explanation is sought for how "only" demonstrating support with respect to the "81 case" can be considered to demonstrate full support, under 112 first paragraph, for an instant rejection.

35 U.S.C. 120 clearly does not entitle Applicants to claim priority unless the pending claims are fully supported by the instant disclosure.

For Applicants consideration, <u>In re Lund</u>, 376 F.2d 982, 153 USPQ 624 (C.C.P.A. 1967) is understood to be on point. In <u>Lund</u>, the C.C.P.A. stated:

We recognize that, subject to compliance with 35 USC 112 and 132, the disclosure in a patent application may be deliberately supplemented or completed by reference to disclosure set forth in other patents, National Latex Products Co. v. Sun Rubber Co., 274 F.2d 224, 230, 123 USPQ 279, 283 (6 Cir., 1959); In re Chaplin, 35 C.C.P.A. 1155, 168 F.2d 85, 77 USPQ 601; In re Stauber, 18 C.C.P.A. 774, 45 F.2d 661, 7 USPQ258, to disclosure in earlier or concurrently filed copending applications, In reZiegler, 53 C.C.P.A. 1457, 363 F.2d 888, 150 USPQ 619, 621; In re Fried, 51 C.C.P.A.1118, 329 F.2d 323, 141 USPQ 27, which may have become abandoned, In re Heritage, 37 C.C.P.A. 1109, 182 F.2d 639, 86 USPQ 160, or, in general, to "disclosure which is available to the public," In re Heritage. As the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that the cited document is part of the referencing document as if it were fully set out therein.

Here, however, we do not think that the single sentence by which Margerison [the prior art reference] refers to his earlier application - "The present application is a continuation-in-part application of our application Serial No. 763,806, filed September 29, 1958 (now abandoned)" - is sufficient in and of itself to render Example 2 of the abandoned application part of the patent disclosure as if fully set out therein. **There is**

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little in the term "continuation-in-part" which would suggest to the reader of the patent that a disclosure of the nature of Example 2 is present in the earlier application and that it should be considered a part of the patent specification. Thus we cannot agree that the subject matter of claim 3 is tacitly "described" in the Margerison patent within the meaning of § 102(e).

Lund, 376 F.2d at 1370-71.

As related the following statements have also been made by Applicants:

The following...corresponds to the specification support in the right column... [cites to the '490 patent '81 disclosure omitted]

Page 30, paper no. 17, last two paragraphs of '024...

The following tables...corresponds to the specification...[cites to the '490 patent '81 disclosure omitted].

Page 32, '641, last paragraph.

However, explanation is sought for how the '81 disclosure can be considered "the specification support".

In view of the above and upon consideration of the entire file wrapper history for what Applicants have alleged for pending claim support (defined below in this paragraph), Examiner finds that Applicants have failed to establish that pending claims are fully supported by an embodiment of the instant '526 disclosure "....in such full, clear, concise, and exact terms..." as is required under the law of 35 U.S.C. 112 1st paragraph. It is noted that Applicants have provided the PTO with conflicting pending claim support within the bodies of the following papers:

-Appendix B;

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-instant paper 11 filed 8/13/97 pages 12-18;

-instant paper 12 filed 8/6/97;

-'044 paper no. 14 section D;

-'408 paper no. 9;

-'408 paper no. 11.

(Hereinafter, the totality of the above alleged support is referred to as the 'alleged pending claim support'). However, the alleged pending claim support contains....sentences, paragraphs, and passages that do not exist anywhere (emphasis added) in the entire instant disclosure.

Applicants must understand that it is necessary for Examiner to find pending claim support within the four corners of the instant disclosure if he is to factually conclude that 35 U.S.C. 112 1st paragraph is satisfied with respect to pending claims. Examiner must find full support for pending claims within the four corners of the instant disclosure for factually determining what effective priority date, if any, pending claims are properly afforded. Hence, it is **the manner** (emphasis added) in which Applicants have alleged that the pending claims are 'fully supported' by "only" citing the

"81 case", that compels the rejections below.

Specification

3. As a preliminary matter, it is noted that paper no. 22 of co-pending application '571, filed 3/4/99 has been objected to under 35 U.S.C. 132 because it attempts to introduce new matter into

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the co-pending disclosure which Applicants have alleged to by the same as instant disclosure '526.

35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. Because Applicants have alleged the disclosure of '571 and '526 to be the same as parent '329, Examiner will address the differences.

The '571 added material which is not supported by the original '87 C.I.P. disclosure is as follows:

-the amendment, of paper no. 22, to substitute --units-- for "words" page 37 (line 24) as
well as the amendment to substitute --words-- for "units" (line 25) of the same page 37.

Such amendment is rejected, after considering Applicants 'alleged support for making the change'
('571/'526 Page 14 line 32 through page 15 line 6; cited below), for the following substantiated
reasons. The amendment would modify, at a later time, what had been disclosed at the earlier
time of making the '571 disclosure (which Applicants allege is the same disclosure as the '87

C.I.P. disclosure). The amendment changes '571 page 37 so that it would read in the following
manner (additions are underlined; and deletions are bracketed):

Controller, 39, 44, or 47, is preprogrammed to receive [units] words of signal information, to assemble said [units] words into signal [words] units that subscriber station apparatus can receive and process, and to transfer said [words] units to said apparatus.

'571 disclosure page 37 lines 22-25.

Applicants allege, at the bottom of page 1 of '571 paper no. 22, that corresponding page 14 line 26 through page 15 line 6 demonstrate 'full support' for the '571 3/4/99 amendment.

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However, Examiner rejects this allegation. The alleged support (for making the change) is as follows:

The term "signal word" hereinafter means one full discrete appearance of a signal as embedded at one time in one location on a transmission. Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio. Such strings may or may not have predetermined data bits to identify the beginnings and ends of words. Signal words may contain parts of signal units, whole signal units, or groups of partial or whole signal units or combinations.

'526/'571 Page 14 line 32 through page 15 line 6.

However, this citation is found to be evidence why '571 page 37 'should not' (emphasis added) be changed. What was described on '571 page 14 is found to be inadequate for changing 'the specific embodiment' that was described on '571 page 37 because 'the specific embodiment' of '571 page 37 described 'words as containing units'. The alleged support, is thus found insufficient for changing, at a later time of 3/4/99, subject matter of the specific embodiment that was earlier set forth by '571 page 37 on it's filing date of 6/5/95.

Moreover and giving further consideration, Examiner finds that the alleged support, for making the amendment, is little to nothing more than an invitation to experiment. The alleged support is found confusing; and, taken as a whole, it is found non-sensical. It does not set forth, "....in such full (emphasis added), clear (emphasis added), concise (emphasis added), and exact terms (emphasis added)...." (112 1st paragraph), an adequate description in itself. If there is any sense to be made from the passage corresponding to the alleged support, it is found only when

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focusing on a 'limited a portion of the whole'. However, when taken as a whole, the page 14 passage is found unclear and non-concise.

Moreover, it is recognized that the United States Court of Appeals for the Federal Circuit has already given deliberate consideration to the meaning of the term 'unit' when identifying that a 'program unit' equates to the 'Wall Street Week program'. The identification of what is a 'program unit' served as a premise for concluding that "information of a selected television program unit" extended to "time and channel information" when affirming that claim 35 of U.S. patent 5,335,277 ('277) is invalid under 35 U.S.C. 102(b). It is noted that, in response to Appeal No. 97-1532, the Court stated the essential question at issue.....

The only issue presented...was whether the claim limitation "information of a selected television program unit" could include just the time and the channel that a particular television program was to be broadcast or whether the "information must include a unique program-identifying code"

See <u>Personalized Media Communications</u>, L.L.C. v. International Trade Commission et al, Appeal No. 97-1532 (decided January 7, 1999) page 4 lines 2-6.

The United States Court of Appeals for the Federal Circuit recognized, by giving what is understood to be deference to the International Trade Commission's (ITC) finding of fact, that.....

A "selected television program unit" is a particular television program, such as Wall Street Week.

Id. page 6 lines 1-2.

Examiner has independently considered the matter and finds the same fact. In any event and on that foundation of common sense, the United States Court of Appeals for the Federal Circuit

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rendered their opinion...

Thus, we conclude that the prosecution history does not prevent the term "information of a selected television unit" from reading on channel and time information...

<u>Id</u>. page 9 lines 17-19.

Examiner finds that if what earlier constituted the '571 disclosure (alleged by Applicants to be the same as the '87 C.I.P. disclosure) were to be modified at a later time of 3/4/99, it would alter the meaning of the '571 term 'unit', that was earlier disclosed on 6/5/95. Such modifications stand to cause claims to be 'erroneously constructed' by assigning mis-interpretations... ones that the '571 disclosure (alleged to be the '87 C.I.P. disclosure) did not afford.

In United States Court of Appeals for the Federal Circuit Appeal No. 97-1532,

Personalized Media Communications, L.L.C. (PMC) (assignee of the instant disclosure) alleged that the '277 claim 35 term "information" constituted a unique identification; however, PMC's allegation was rejected by the Court...

We also reject PMC's argument that functionally claim 35 requires the controller to store information that uniquely identifies the desired television program...

Id. Page 6 lines 14-15.

The United States Court of Appeals for the Federal Circuit elaborated on why **PMC's allegation** lacked accuracy, when affirming that the term "information" did not constitute a unique code...

The written description uses the term "information as a broad term which embraces many different types of information. For example, the written description uses "meter-monitor information as a broad term to include different types of information such as "dates and times", "unique identifier codes for each program unit (including commercials)," "unique codes from programming (other than programming identified by program unit codes) whose use obligates users to make payments," "origins of transmissions (e.g., network

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source stations, broadcast stations, cable head end stations)," and "unique codes that identify the sources and suppliers of computer data."

Id. Page 7 line 16 thru page 8 line 1 citing the '277 patent, col. 29:20-41 & 60-61.

Examiner finds Applicants '571 allegation that corresponding page 14 'fully supports' the proposed changes to '571 page 37 at the later time of 3/4/99, with respect to **the same '87 C.I.P. disclosure** and with respect to **the same term 'unit**', to constitute little to no more accuracy than PMC's rejected allegation that '277 claim 35 afforded a construction that included a unique identification when specifically considering the '87 C.I.P. written description (and file wrapper history for determining what constitutes "information of a selected television program **unit**"). It is suggested that if Applicants continue to allege that '526 and '571 are the same disclosures, that the new matter be canceled from the '571 disclosure.

4. The '526 disclosure was filed with the PTO on 6/7/99. The amendment, of paper no. 2 page 3, was also filed 6/7/95. It is a *factual occurrence* that cannot be changed that Applicants have 'incorporated by reference', subject matter of the '329 parent "in it[']s entirety" for defining their instant disclosure.....

As the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that the cited document is part of the referencing document as if it were fully set out therein...

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Lund, 376 F.2d at 1370-71.

As a *factual circumstance* that cannot be changed, paper no. 2 incorporated by reference it's parent "in it[']s entirety" on 6/7/99 so that the portion of "in it[']s entirety" that is not common to the '87 C.I.P. is considered, factually, new matter to the instant disclosure. Put differently, subject matter not common (to the original '87 C.I.P. disclosure's pages 1-557 and accompanying figures), but which constituting the remainder of '329 application....characterized by the language "in it[']s entirety" are found, by *factual circumstance*, to benefit from an effective filing date of 6/7/95. Specifically, the instant disclosure is found, by substantiated evidence, to constitute "in it[']s entirety" the following:

-all papers filed, with 08/113,329, on or before the instant filing date of 6/7/95 (particularly papers 7- 8, & 10-11 and claims 1-3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 49-84) (not common);

-the '87 C.I.P. disclosure's 557 pages with corresponding figures (common).

As such the instant '526 disclosure is, by the above substantiated evidence, found to constitute a continuation-in-part of the 08/113,329 disclosure because the statement 'incorporation by reference' of "in its entirely" added 'in part' all papers filed therein on or before 6/7/95.

However, even though Applicants are entitled to present pending claims which derive support from the 6/7/95 subject matter which was added 'in part', such claims are only afforded the effective filing date of 6/7/95. And as a matter of course, such claim(s) are hereby rejected as being anticipated and/or obvious over:

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-the 'great (x4) grand parent' '725 patent;

-the 'great(x5) grand parent' '490 patent; and

-WO 89/02682 (a related PCT publication).

So although Applicants have alleged, in interview, that it is acceptable to 'incorporate by reference' the 08/113,329 application "in it[']s entirety" so as to include 'all papers filed on or before 6/5/99' and still benefit from an effective filing date of the '87 C.I.P., the allegation is hereby rejected.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Claim Rejections - 35 U.S.C. § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to

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enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 2-65 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Whether a specification provides an adequate written description for claimed subject matter is a question of fact. Moreover, it is a question of fact as to whether pending claims recite subject matter omitted from the Sept. 11, 1987, disclosure even when the subject matter was included in the '81 disclosure.

-as stated above, the instant application is:

Application no.	Date	Status
-a continuation of 08/113,329	filed 8/30/93	pending;
-which is a continuation of 08/056,501	filed 5/3/93	now patent 5,335,277; ('277);
-which is a continuation of 07/849,226	filed 3/10/92	now patent 5,233,654; ('654);
-which is a continuation of 07/588,126	filed 9/25/90	now patent 5,109,414; ('414);
-which is a continuation of 07/096,096 ('87 C.I.P.) (This C.I.P. did not specifically include or expressly incorporate by reference application 06/829,531)	filed 9/11/86	now patent 4,965,825; (*825)

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-which is a continuation-in-part of 06/829,531 filed 2/14/86 now patent 4,704,725; ('725)

-which is a continuation of 06/317,510 ('81) filed 11/3/81 now patent 4,694,490. ('490)

-no pending claim is original to the '87 C.I.P.;

-the *alleged pending claim support*, as written description for pending claims 2-65, has been considered with respect to the instant '526 disclosure. However, the alleged support is rejected because:

-the '81 written description was not specifically included in the '87 C.I.P. written description;

-the '87 C.I.P. did not expressly incorporate by reference the '81 subject matter into the '87 C.I.P.;

-that instant disclosure has not been found to describe the alleged '81 support "....in such full, clear, concise, and exact terms...." as is required under the law of 35 U.S.C. 112 1st paragraph.

However, Examiner finds it trite to say that the instant '526 disclosure must contain written description for pending claims 2-65 in order to fully satisfy 112 1st paragraph, and in order to be afforded any filing date whatsoever and in view of the finding that no pending claim is original to the '87 C.I.P.

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Applicants have acknowledged, in interview, that they did not include *the alleged pending* claim support either 'specifically' or by 'expressly incorporating it by reference' when originally making the '87 C.I.P. disclosure on 9/11/87. Applicants' acknowledgment is thus found to corroborate Examiner's analysis, of the '87 C.I.P. disclosure, and finding of the same.

Hence, in consideration of the alleged pending claim support, Examiner does not find 'full support' in 'an instant '526 disclosure embodiment' "....in such full, clear, concise, and exact terms...." as required by the law of 35 U.S.C. 112 1st paragraph. And on the basis of this finding, it is further found that it is entirely moot whether 'the cited '81 embodiment' can fully support the pending claims until such time that pending claims are found to be supported "....in such full, clear, concise, and exact terms...." in the instant '526 disclosure.

The following is found to be attached to the 'significance of incorporation by reference' and lack thereof. It is fact that Applicants have failed to maintain continuity of 'the entire '81 (Nov. 3, 1981), disclosure' when they filed the continuation-in-part document of '87 C.I.P. (Sept. 11, 1987). Because, the '87 C.I.P. disclosure failed to include the '81 disclosure either specifically or by an express incorporation by reference, subject matter omitted from the '87 C.I.P. disclosure, but included in the '81 disclosure, will enter the 'public domain' absolutely no later than 17 years from the patenting of the '725 patent. Further, it is stressed that pending claims may not recite any of the omitted subject matter as doing so fails the written description requirement of 112 first paragraph unless the omitted subject matter can be found

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in 08/113,329 papers that were filed on or before 6/7/95. But, even if it can be found in 08/113,329, it shall then only be afforded the 6/7/95 filing date and shall be considered for rejected under 102 and 103 in view of Applicants' own publication and patents.

Moreover, Applicants may not amend any *pending disclosures* to include a statement of 'incorporation-by-reference' because such an amendment would improperly allow Applicants to freely circumvent the law of 112 1st paragraph. Such an amendment, if made, would constitute recapturing the subject matter which will enter 'the public domain' no later than on November 3, 2004, otherwise known as 17 years from the patenting of the last '81 disclosure a.k.a. the '725 patent. All 'omitted subject matter', now recited in pending claims, is rejected as failing the written description requirement of 35 U.S.C. 112 first paragraph ("in its entirety" excepted) because:

-Section 120 merely provides a mechanism whereby an application becomes entitled to benefit of the filing date of an early application disclosing the *same* subject matter.

Common subject matter must be disclosed, in both applications, either specifically or by an express incorporation by reference of prior disclosed subject matter;

-nothing in section 120 itself operates to carry forward any disclosure from an earlier application';

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-the statement that an application is a continuation-in-part of another application is in a broad sense a "reference" to the earlier application, but a mere reference to another application is not an incorporation of anything therein into the application containing such reference for the purposes of the disclosure required by 35 U.S.C. 112. Likewise it does not serve to bring a disclosure within the requirements of 35 U.S.C. 120 so as to give a later application the benefit of the filing date of an earlier application;

-the later application must itself contain the necessary disclosure;

-under Section 120, no claimed subject matter is entitled to the benefit of the filing date of an earlier application unless that subject matter has been disclosed in every intervening application relied upon to establish a chain of copendency;

-Section 120 contains no magical disclosure-augmenting powers able to pierce new matter barriers. It cannot, therefore, "limit" the absolute and express prohibition against new matter;

-it is very clear that the statement that "an application is a continuation-in-part of an earlier application" fails to incorporate by reference all those portions of the earlier application that were not included in the later-filed application;

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-as the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that the cited document is part of the referencing document as if it were fully set out therein;

-the language "continuation-in-part" is insufficient to incorporate any part (emphasis added) of a parent case. All it means is that insofar as the disclosure of the great (x5) grandparent '490 finds corresponding disclosure to all intervening 'parents', are pending claims entitled to the effective filing date of '490;

Although it is conceptually recognized that it is possible to draft pending claims to be generic to an embodiment of the '81 disclosure and an embodiment of the instant '526 disclosure which did not incorporate the '81 disclosure specifically or by reference, the following request is made:

- 1) make a 'one-to-one correspondence' between 'the original '87 C.I.P. disclosed terms' and 'pending claim terms';
- 2) make a 'one-to-one correspondence' between 'the originally disclosed '87 C.I.P. steps within a single '87 C.I.P. embodiment' and 'pending claim steps';

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3) make a 'one-to-one correspondence' between 'the originally disclosed '87 C.I.P. processes' and 'the pending claim processes in the manner such processes are claimed' so that the 'steps' of 2) and the terms of are recognized therein;

- 4) repeat steps 1) through 3) with the '81 disclosure;
- 5) reconcile the steps 1) through 4) with each element of the alleged pending claim support when there is a discrepancy.

For the benefit of successfully traversing the written description rejections made herein, Examiner suggests that Applicants perform steps 1) -5) to an extent that they demonstrate "....in such full, clear, concise, and exact terms....", the pending claims as proscribed by the law of 35 U.S.C. 112 1st paragraph.

Moreover, pending claims are found to recite 'terms whose definitions are different/diverse' between the '81 disclosure and the '87 disclosure. However and because the *alleged pending claim support* relies on the '81 disclosure even though the claims recite modifications to the terms with elements of '87 definitions, the claims cannot be afforded any effective filing date whatsoever. If Applicants perform the above described steps 1-5 successfully, then such '87 modified terms will only be afforded the effective filing date of the '87 disclosure. This can be overcome by amending such claims with a negative limitation to delete the "modification".

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Hence, it is suggested that Applicants consider providing an enumerate list of definitions for each pending claim which recites 'terms whose definitions are difference/diverse' between the '81 and '87 C.I.P. disclosures for the purpose of satisfying 112 1st paragraph's requirement that alleged invention be set forth "....in such full, clear, concise, and exact terms....". Examples of such terms include: 'programming'; 'instruct'; 'instructions'; 'information'; and 'data'.

The following rejections are made in consideration of the totality of the discussion above.

Considering claim 2 there is no support found for:

```
-A method of communicating;
```

- -information at;
- -a multimedia receiver station;
- -said receiver station including;
- -at least;
- -one receiver for;
- receiving;
- -signals;
- -a computer;
- -operatively connected to said;
- -at least;

```
-one receiver for;
-processing and;
-communicating;
-information, and;
-a plurality of;
-output devices with;
-each output device;
-operatively connected to said;
-at least;
-one;
-receiver;
-or;
-said computer for;
-outputting;
-information to;
-a subscriber;
-said method comprising the steps of;
-displaying at;
-one of;
-said output devices;
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-a television program that;
-promotes;
-a multimedia product;
-or;
-service;
-inputting;
-a subscriber command;
-controlling;
-said receiver station to;
- receive;
-at least;
-two instruct signals;
-in response to;
-said subscriber command;
wherein each one;
-of said;
-at least;
-two instruct signals;
-at least;
-one of;
```

```
-specifies and;
-designates;:
-(1) a portion of;
-multimedia programming, and;
- (2) a specific function;
-to be;
-performed with;
-said specific portion of;
-multimedia programming;
-detecting the presence of said;
-at least;
-two instruct signals;
-at said receiver station;
-each;
-of said;
-at least;
-two;
-instruct signals;
-at least;
-one;
```

```
-of;
-specifying and;
-designating;
-at least;
-one;
-of;
-1) a portion of a;
multimedia programming signal to;
-receive;
-(2) a portion of a;
-multimedia programming signal to;
-communicate to a;
memory location;
-(3) a digital datum to;
-record;
-or;
-play;
- (4) a portion of a;
- multimedia programming signal to;
-communicate to;
```

```
-a processor;
-(5) a portion of;
-a television signal to;
-communicate;
-at least;
-one;
-of;
-to a television monitor and;
-a television recorder;
- player;
-(6) two portions;
-of a;
- multimedia presentation to;
-communicate from;
-separate locations to;
-an output device;
-with;
-at least;
-one;
-of said;
```

```
-separate locations being;
-a memory;
-or;
-storage location;
- (7) a multimedia presentation;
-graphic, to;
-generate a;
-place to;
-present;
-multimedia output;
-or;
- analyzing said;
-at least;
-two;
-or;
- more;
-specific portions of;
-multimedia programing;
-in accordance with said;
-designated;
```

```
-specific function to be;
-performed;
-with each of;
said specific portion of;
-multimedia programming;
-based on said step of;
-controlling; and;
-outputting;
-organized;
-at least;
-two;
-or more;
-specific portions of;
-multimedia programming as a;
-part of;
-a single multimedia programming presentation to;
-at least;
-one of;
-said output devices at;
-said receiver station;
```

```
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```

-based on;-said step of;-organizing.

Considering claim 3 there is no support for:

```
-the method of claim 2, further comprising the step of
```

-programming;

-said receiver station to;

-store a;

-data portfolio;

-said data portfolio comprising;

-at least;

-one identification data of;

-financial securities, and to;

-receive and;

-process;

-news items;

-related to;

-said financial securities in;

-said data portfolio;

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-said news items comprising;

-financial data.

Considering claim 4, there is no support for:

-the method of claim 2, further comprising the step of

-programming said;

-receiver station to;

-respond;

-instructions;

-associated with;

-a television signal;

-said television signal comprising;

-at least;

-one unit;

of television programming;

-with each unit having an;

-associated identification datum.

Considering claim 5, there is no support for:

-the method of claim 2, further comprising the step of

```
-programming said receiver station to;
       -process;
       -at least;
       -one television programming and;
       -multimedia programming received from;
       -remote source and;
       -present said;
       -at least;
       - one;
       -of television programming and;
       -multi media programming in;
       -at least;
       -one predetermined fashion.
Considering claim 6, there is no support for:
       -the method of claim 2, further comprising the steps of:
       -processing said;
       -subscriber command;
       -based on;
       -at least;
```

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```
-one of said;
        -at least;
        -two instruct signals; and
        -at least;
        one of;
        -receiving and;
        -enabling said;
        -specific portion of;
        - multimedia programming to;
        -perform said;
       -specific function thereupon;
       -based on said step of;
       -inputting and;
       -processing.
Considering claim 7, there is no support for:
       -the method of claim 2, further comprising the steps of:
       -processing;
```

-said subscriber command;

-based on one of said at least;

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```
-two instruct signals; and
-outputting;
-some;
-programming at;
-a second output device;
-based on said step of inputting and;
```

Considering claim 8, there is no support for:

```
-the method of claim 2, further comprising the steps of:
```

```
-processing said;
```

-processing.

-subscriber command; an

-communicating;

-some information to;

-a remote station;

based on said steps of;

-inputting and;

-processing.

Considering claim 9, there is no support for:

- -A method of communicating
- -subscriber station information;
- -from a;
- -subscriber station to;
- -at least;
- -one;
- -remote data collection station;
- -said method comprising the steps of:
- -(1) inputting;
- -a subscriber reaction;
- -at a subscriber station;
- -determining the presence of;
- -a specific subscriber input;
- -at said subscriber station by;
- -processing said;
- -subscriber reaction;
- -(3) receiving;
- -at said subscriber station;
- -in accordance with said;
- specific subscriber input;

```
-an instruct signal for;
-processing and;
-at least;
-two specific portions of;
-multimedia programming for;
- outputting;
-(4) processing;
-said instruct signal which;
-organizes said;
-at least;
-two specific portions of;
-multimedia programming, and;
-outputs said;
-at least;
-two specific portions of;
-multimedia programming;
as;
a part of;
a single;
multimedia programming presentation;
```

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```
based on said step of;
-determining; and
-(5) transferring;
-from said subscriber station;
-to said;
-at least;
-one;
-remote data collection station;
-at least;
-one datum which, based on;
-said step of processing;
-evidences one of;
-processing said;
-instruct signal and;
-outputting said;
-multimedia programming presentation.
```

Considering claim 10, there is no support for:

- -the method of claim 9, wherein
- -subscriber reaction is;

```
-input by;
-a computer, said method further comprising the steps of:
-storing;
-at least;
-one subscriber instruction to;
-input;
-a reaction;
-in order to;
-receive;
-at least;
-one of;
-specific mass medium programs;
-data;
-new items, and;
-computer control instructions; and
-receiving;
-at least;
-one identifier which;
-at least one of;
-specifies an;
```

```
-designates said;
        -at least;
       -one instruct signal to;
        -prompt;
       said computer to;
       -input said;
       -said subscriber reaction;
Considering claim 11, there is no support for:
       -the method of claim 9, wherein
       -at least;
       -one of;
       -said;
       -subscriber reaction and;
       -said instruct signal is;
       - input by;
       -a computer,
       said method further comprising the steps of:
       -storing a;
       -subscriber instruction to;
```

```
-one of;
-process and;
-present;
-at least;
-one of;
-mass medium programs;
-data;
-news items, and;
-computer control instructions in;
-a specific fashion; and;
-processing or;
- presenting;
-at least;
-one of;
-specific mass medium programs;
-data;
-news items; and
-computer control instructions;
-in accordance with said;
instruction.
```

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Considering claim 12, there is no support for:

```
-said information that;
-designates;
-at least;
-one of said;
-instruct signal and said;
-output to;
-deliver is;
-detected in an;
-information transmission;
-at least;
-one of a;
-data and;
-programming source;
-said method further comprising the steps of:
-programming;
-a processor to;
-respond to;
-information;
-communicated from said;
```

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-one of said; -data and said; -programming source; -receiving an; -information transmission from; -said; -one of; -said data; and -said programming source; -inputting; -at least; -some of; -said information transmission to; -a control signal detector; -detecting one of; -data and; -said instruct signal in; -said information transmission; and

-passing said one of;

-detected data and;

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-said instruct signal to;

-said processor.

Considering claim 13, there is no support for:

```
-a method of controlling;
```

-a remote transmitter station;

-to communicate;

-program material to;

-a remote receiver station; and

-controlling said;

-remote receiver station to;

-process;

a receiver specific response;

-said method comprising the steps of:

-(1)receiving mass medium programming;

-to be transmitted;

-by the remote intermediate mass medium transmitter station; and

-delivering said mass medium programming a transmitter;

-(2)receiving at least;

-one instruct signal at;

```
-said remote intermediate mass medium transmitter station;
-said at least;
-one instruct signal operative at;
-the remote receiver station to organize at least;
-two specific portions of said multimedia programming;
-and to;
-output said at least;
-two specific portions of said multimedia programming as a;
-part of a;
-single multimedia programming presentation at;
-said receiver station, base on a;
-subscriber reaction to;
-information contained in;
-said mass medium programming, and;
-communicating said at least;
-one instruct signal to;
-said transmitter;
-(3)receiving at least;
-one control signal;
-said remote transmitter station wherein said at least;
```

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```
-one control signal;
-controls the communication of said;
-mass medium programming and said at least;
-one instruct signal between said;
-remote transmitter station and said;
-remote receiver station; and
-(4)transmitting from;
-said remote transmitter statio at least;
-one information transmission containing said;
```

-mass medium programing and said at least;

Considering claim 14, there is no support for:

- -the method of claim 13, further comprising the step of
- -embedding;
- -one of said at least;

-one instruct signal.

- -one instruct signal in;
- -a signal;
- -containing said;
- -mass medium programming;

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- -before transmitting at least;
- -a portion of;
- -said mass medium programming from;
- -said remote transmitter station.

Considering claim 15, there is no support for:

- -the method of claim 13, wherein
- -said mass medium programming includes;
- -audio;
- -or;
- -text.

Considering claim 16, there is no support for:

- -the method of claim 13, wherein said
- -mass medium programming includes
- -television program.

Considering claim 17, there is no support for:

- -the method of claim 13, wherein said at least
- -one instruct signal further

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-comprises

-one downloadable executable code.

Considering claim 18, there is no support for:

```
-a method of
```

-controlling;

-a remote intermediate transmitter station to;

-communicate;

- at least;

-one instruct signal to at least;

-one receiver station;

-said remote intermediate transmitter station including;

one of a;

-broadcast and;

-cablecast;

-transmitter, a;

-plurality of selective transfer devices;

-each operatively connected to said one of;

-said broadcast and said;

-cablecast;

```
-transmitter;
-a receiver for;
-receiving said at least;
-one instruct signal from at least;
-one origination transmitter station;
a control signal detector and one of;
-a controller and;
-computer capable of;
-controlling at least one of said;
-plurality of selective transfer devices, and with said;
-remote intermediate transmitter station adapted to;
-detect the presence of at least;
-one control signal, to;
-control the communication of said at least;
-one instruct signal;
-in response to said at least;
-one control signal, and to;
-deliver at said one of;
-said broadcast and;
-said cablecast transmitter said;
```

```
-at least;
-one instruct signal;
-said method comprising the steps
-originating said;
-at least;
-one instruct signal at said
-at least;
one origination transmitter station and;
-delivering said;
- at least;
-one instruct signal to;
- at least;
- one origination transmitter,
-said
-at least;
-one instruct signal being;
-effective at said;
-at least;
-one receiver station to;
-organize;
```

```
-at least;
two specific portions;
-of multi media programming and to;
-output said;
- at least;
-two specific portions of;
-multimedia programming as a;
-part of a;
-single multimedia programming presentation;
-at said receiver station, based on;
-a subscriber input;
-(2) receiving said;
-at least;
-one control signal which at;
-the remote intermediate transmitter station;
-is operative to control the communication of;
-said instruct signal; and
-(3)transmitting said;
- at least;
-one control signal to said;
```

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```
-at least;
```

-one origination transmitter before;

a specific time.

Considering claim 19, there is no support for:

```
-the method of claim 18, further comprising the step of
```

```
-embedding said;
```

- at least;
- -one control signal;
- -containing said;
- at least;
- -one instruct signal;
- -before;
- -transmitting;
- -at least;
- -a portion of; said
- -at least;
- -one instruct signal to;
- -said remote intermediate transmitter station.

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Considering claim 20, there is no support for:

```
-the method of claim 18, wherein
-at least;
-one of (i);
-said specific time is;
-a scheduled time of;
-transmitting said;
-at least;
-one instruct signal;
- or;
-some information;
-associated with said;
-at least;
-one instruct signal from;
-said remote intermediate transmitter station, and
-(ii) said
-at least;
one control signal is;
-effective at said remote intermediate transmitter station;
-to control;
```

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```
-at least one of;
```

- -said plurality of selective transfer devices;
- -at different times.

Considering claim 21, there is no support for:

- -a method of delivering one of;
- -a coordinated media presentation and;
- -a multichannel programming presentation at;
- -a receiver station;
- -said receiver station including;
- -a plurality of receivers;
- -a tuner;
- -a processor; and
- -a plurality of output devices;
- -a first of said plurality of receivers having;
- -a signal output;
- -coupled as;
- -an input to;
- -said processor;
- -said processor having;

```
-an output;
-operatively connected to;
-a control input of;
-said tuner;
-said tuner being operatively connected;
-at least;
-one of;
-said plurality of receivers;
-so as to;
-control reception of;
-signals by said;
-at least;
-one of;
-said plurality of receivers, and;
each of;
-said plurality of;
-output devices being;
-operatively connected to said plurality of receivers for;
-outputting;
-received information;
```

```
-said method comprising the steps of:
-receiving at;
-said first of;
-said plurality of receivers;
-a first signal;
-said first signal including;
-a first mass medium program;
-and
-at least;
-one embedded control signal;
-transferring; said
-first mass medium program; to a
-first of said;
-plurality of output devices for;
-outputting to
a subscriber;
-detecting said;
-at least;
-one embedded control signal; and
-inputting said;
```

```
-at least;
-one embedded control signal; to
-said processor;
-transferring,
-under control of;
-said processor,
-at least;
-one embedded control signal to;
-said tuner;
-so that;
said tuner causes;
-said plurality of receivers;
-to receive;
-a second signal;
-said second signal;
-including;
-a second mass medium program;
-combining;
-at least;
-a portion of;
```

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- -said first mass medium program and said;
- -second mass medium program at;
- -said plurality of output devices; and
- -outputting at;
- -said receiver station;
- -a coordinated presentation;
- -of said first mass medium program; and
- -said second mass medium program.

Considering claim 22, there is no support for:

the method of Claim 21, further comprising the step

of:

- -determining that said;
- -at least;
- -one embedded control signal is;
- -addressed to a device.

Considering claim 23, there is no support for:

-the method of Claim 21, further comprising the step

```
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        of:
        -determining
        -a device
        -addressed
       -by said at least one embedded control signal.
Considering claim 24, there is no support for:
       -the method of Claim 21, further comprising the step
       of:
       -identifying; said
       -at least;
       -one embedded control signal;
       -that is addressed to a;
       device.
Considering claim 25, there is no support for:
       -the method of Claim 21, further comprising the step
       of:
       -inputting;
       -a subscriber command to;
```

```
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        -one of;
        -turn on;
        -said first;
        -of a plurality of receivers and;
        -turn off;
        -said first of a plurality of receiver.
Considering claim 26, there is no support for:
        -the method of Claim 25, further comprising the steps of:
       -inputting;
       -a subscriber command;
       -to turn on a second of;
       -said plurality of receivers and;
       -associated equipment.
Considering claim 27, there is no support for:
       -the method of Claim 21, further comprising the step of
       -controlling;
       -the receiver station to;
       -receive;
```

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```
-a selected signal;
```

- -in response to;
- -a subscriber command,
- -said selected signal comprising
- -a media programming presentation signal.

Considering claim 28, there is no support for:

- -the method of Claim 21, further comprising the steps of:
- -detecting;
- -at least;
- -one second embedded control signal in;
- -a signal;
- -containing;
- -said second mass medium program and;
- -inputting said;
- -at least one;
- -second embedded control signal to;
- -said processor; and
- -transferring;
- -said at least;

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- -one second embedded control signal to;
- -said tuner;
- -so that said tuner causes;
- -said plurality of receivers to;
- -receive;
- -a third signal;
- -said third signal comprising;
- -a third mass medium program.

Considering clam 29, there is no support for:

- -the method of Claim 21, wherein said
- -second mass medium program;
- -from said step of;
- -combining is;
- -output at;
- -a second output device.

Considering claim 30, there is no support for:

- -the method of claim 21, wherein
- -said receiver station is;

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- -a transmitter station,
- -said step of combining comprises
- -multiplexing; and
- -said step of outputting comprises;
- -transmitting;
- -said coordinated presentation.

Considering clam 31, there is no support for:

- -An apparatus for
- -receiving;
- -a media presentation signal in;
- -a broadcast network,
- -said broadcast network having;
- -a transmitter for;
- -combining and;
- -distributing said;
- -media presentation signal;
- -said apparatus comprising:
- -a receiver for;
- -receiving;

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-a first media presentation signal; -from a broadcast network; -a tuner; -a processor; -operatively connected to; -said receiver and; -said tuner; -an output device; -operatively connected to; -said processor and said; -receiver; -said processor; -programmed for; -receiving; -at least; -one control signal from; -said first media presentation signal; -transferring; -said first media presentation signal to; -said output device;

```
-detecting;
-at least;
-one control signal;
-in said first media presentation signal;
-controlling;
-said tuner;
-in response to said;
-at least;
-one;
-control signal;
-to tune to;
-a second media presentation signal;
-combining;
-said second media presentation signal;
-with said first media presentation signal;
-thus providing;
-a combined output and;
-transferring;
-said combined output to said;
-output device.
```

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Considering claim 32, there is no support for:

- -the apparatus of Claim 31, wherein said
- -media presentation signal is;
- -a cablecast transmission.

Considering claim 33, there is no support for:

- -the apparatus of Claim 31, wherein
- -said media presentation signal is;
- -a satellite transmission.

Considering claim 34, there is no support for:

- -the apparatus of Claim 31, wherein said at least
- -one control signal is;
- -embedded in;
- -a non-visible portion of;
- -a video signal.

Considering claim 34, there is no support for:

the apparatus of Claim 31, wherein said

-at least;

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- -one control signal is;
- -encoded in;
- -a reserved and;
- -predefined portion of;
- -a data stream.

Considering claim 36, there is no support for:

- -the apparatus of Claim 31, wherein
- -an identifier;
- -defines where said;
- -at least;
- -one control signal is;
- -located in;
- -a data stream.

Considering claim 37, there is no support for:

- -the apparatus of Claim 36, wherein
- -said data stream is;
- -a sequential stream of;
- -data bits.

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Considering claim 38, there is no support for:

- -the apparatus of Claim 36, wherein
- -said data stream is;
- -a multiple channel data stream;
- -wherein;
- -said multiple channels are;
- -separated by frequency.

Considering claim 39, there is no support for:

- -the apparatus of Claim 36, wherein
- -said data stream is;
- -a multiple;
- -channel data stream;
- wherein said;
- -multiple channels are;
- -separated by time.

Considering claim 40, there is no support for:

the apparatus of Claim 36,

wherein;

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- -said output device is;
- -a television display.

Considering claim 41, there is no support for:

- -the apparatus of Claim 36, wherein
- -said output device is;
- -a media recording device.

Considering claim 42, there is no support for:

- -the method of providing;
- -a coordinated media presentation signal at;
- -a receiver station;
- -said receiver station;
- -having a receiver section;
- -a processing section; and
- -an output generation section;
- -operatively coupled;
- -together and;
- -controlled by;
- -a control section;

```
-said method comprising the
steps of:
-receiving;
-a multichannel signal at;
-an input to;
-said receiver section;
-selecting;
-a first television program;
-from said multichannel signal;
-generating;
-a television output;
-from said first selected television program;
-at said;
-output generation section;
-detecting;
-at least;
-one embedded control signal;
in said first television program;
-decoding;
-from said;
```

```
-at least;
-one embedded control signal;
-instructions;
-directed to;
-said processing section;
-selecting;
-a second television program;
-from said multichannel signal based;
on
-said instructions;
-from said step of decoding;
-combining;
-at least;
-a portion of;
-said first television program with;
-at least;
-a portion of;
-said second television program;
-generating;
-a television output;
```

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-from said step of combining.

Considering claim 43, there is no support for:

the method of Claim 42, wherein said

- -step of combining is;
- -a combination of;
- -television programs in;
- -a time domain.

Considering claim 44, there is no support for:

- -the method of Claim 42, wherein said
- -step of combining is;
- -a combined television program in;
- -a space domain.

Considering claim 45, there is no support for:

- -a method of
- -delivering;
- -a coordinated;
- -multiple media programming presentation at;

- -a receiver station;
- -said receiver station including a;
- -first receiver;
- -a second receiver;
- -a tuner;
- -a processor; and
- -at least one output device wherein;
- -said first receiver has;
- -a signal output coupled as;
- -an input to the processor;
- said processor has;
- -an output;
- -operatively connected to;
- -a control input;
- -of said tuner;
- -said tuner is;
- -operatively connected to;
- -said second receiver so as to;
- -control the reception of;
- -signals by;

```
-said second receiver; and
-each of said;
-at least;
-one;
-output device;
-is operatively connected to;
-a presentation device; for
-the presentation of;
-at least;
-one of video;
-audio; and
-printed text;
-said method comprising the steps of:
-receiving; at
-said first receiver;
-a first mass medium signal;
-said first mass medium signal being of;
-a signal type and;
-comprising;
-at least;
```

```
-one embedded datum;
-determining said;
-signal;
-type of said;
-first mass medium signal at;
-said first receiver based on;
-stored information;
-inputting;
-at least;
-a portion of;
-said first mass medium signal to;
-one of;
-said processor and;
-a first output device;
-of said
-at least;
-one output device;
-based on said step of determining;
-outputting;
-based on
```

```
said first mass medium signal;
-first mass medium programming at said;
-first output device;
-detecting;
-a presence of;
-at least;
-one control signal;
-type at;
-said first receiver;
-inputting;
-said
-at least;
-one control signal;
-type to;
-said processor;
said processor;
-communicating;
-to said tuner;
-a first control signal;
-that controls;
```

```
-said tuner to;
-cause said;
-second receiver to;
-receive a;
-desired second signal; said
-first control signal being of
-said
-at least;
-one control signal;
-type;
-receiving;
-at said second receiver;
-said desired second signal;
-said desired second signal comprising;
-second mass medium programming;
-transferring;
-said second mass medium programming;
-to said
-at least;
-one output device; and
```

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-outputting, at said;

-at least;

-one output device;

-said second mass medium programming;

-in coordination with;

-said first mass medium programming.

Considering claim 46, there is no support for:

-the method of claim 45, wherein

-said first mass medium signal is;

-a digital television signal;

-that

-at least;

-one of;

-contains and;

-generates;

-television programming;

-said method further comprising the steps of

-processing said;

-digital television signal and;

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- -outputting said;
- -television programming to;
- -said first output device.

Considering claim 47, there is no support for:

the method of claim 45, wherein

- -said first mass medium signal is;
- -a digital information channel;
- -said method further comprising the step of
- -transferring;
- -a selected one of said;
- -at least;
- -one embedded datum;
- -to one of;
- -a memory and;
- -said first output device.

Considering claim 48, there is no support for:

- -the method of claim 47, wherein
- -said first output device is;

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```
-a printer;
said method further comprising the step of
-transferring;
-at least;
-one text output to;
-said printer.
```

Considering claim 49, there is no support for

- -the method of claim 47, wherein said
- -first output device is;
- -a video output device;
- -said method further comprising the step of;
- -performing;
- -one of;
- -generating and;
- -outputting;
- -video information content by;
- -processing;
- -data;
- -stored at;

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-said memory.

Considering claim 50, there is no support for:

```
-the method of claim 45, wherein
```

-a plurality of control signal;

-types;

-contains; said

-at least;

-one control signal;

-type and;

-at least;

-one second control signal;

-type and;

-said first control signal;

-of said;

-at least;

-one control signal;

-type is;

-a tuner control signal;

said method further comprising the steps of:

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```
-inputting;
-at least;
-a portion;
-of said;
-desired second signal to;
-a control signal detector; and
-detecting;
-a second control signal of;
-said plurality of control signal;
-types in;
-said inputted;
-at least;
-a portion;
-of said desired second signal.
```

Considering claim 51, there is no support for:

-the method of claim 50, further comprising the step of

-processing;

-at least;

-one of;

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```
-said first control signal and;
```

- -said second control signal of;
- -said plurality of control signal;
- -types based on;
- -stored information.

Considering claim 52, there is no support for:

the method of claim 45, wherein

- -said second mass medium programming is;
- -television programming and;
- said first mass medium programming is;
- -computer output;
- -that one of;
- -completes and;
- -supplements said;
- -television programming,
- -said method further comprising
- -one step of;
- -the group;
- -consisting of:

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-performing; -one of; -locating; and -identifying; -at least; -one of said; -at least; -one control signal; -type in; -a non-visible; -portion of; -a television signal; -and performing; -one of; -locating; and -identifying; -at least; -one of; -said; -at least;

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```
-one control signal;
-type in;
-a data;
-portion of;
-one of;
-a multichannel broadcast transmission; and
-a multichannel cablecast transmission.
```

Considering claim 53, there is no support for:

```
-the method of claim 45, wherein
```

-said first signal;

-commands;

-said processor to;

-process;

-stored;

-subscriber data;

-said method further comprising the step of

-enabling;

-said receiver station to;

-respond to;

Application/Control Number: 08/487,526 Art Unit: 2731 -at least; -one of; -said -at least; -one control signal; -type based; -on said first signal. Considering claim 54, there is no support for: -the method of claim 45, wherein -at least; -one of; -said first signal; -and said -at least; -one control signal; -type; -includes;

-downloadable code.

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Considering claim 55, there is no support for:

```
-a method of
```

- -gathering;
- -information;
- -on the use;
- -at a receiver station; of
- -one of;
- -(a) a resource;
- -that delivers;
- -at least;
- -a portion;
- -of a multiple media programming presentation; and
- -(b) a control signal that is;
- -processed;
- -to control delivery of;
- -at least;
- -a portion of;
- -a multiple media programming presentation;
- -said receiver station having;
- a processor; and

```
-a controlled device;
 -said receiver station;
 -transferring said;
 gathered information to;
 a remote station;
 said method comprising the steps of:
 -(1)identifying said;
 -one of;
 -said resource; and
 -said control signal;
-(2) monitoring;
 -said use of said;
 -one of;
-said resource;
-and said control signal;
-(3) storing;
-a record of;
-said use of;
-said
-one of;
```

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```
-said resource; and
```

- -said control signal;
- -based on said step of monitoring; and
- -(4)communicating, from;
- -said receiver station to;
- -said remote station;
- -information;
- -evidencing;
- -said use of said;
- -one of;
- -said resource and;
- -said control signal;
- -based on said;
- -step of storing.

Considering claim 56, there is no support for:

the method of claim 55, wherein

- -said information;
- -one of;
- -identifies;

```
-and designates;
-at least;
-one of;
-(1) a mass medium program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on a cable system;
-(8) a time of transmission;
-(9) a unique identifier datum;
-(10) at least;
-one of;
-a source and;
-a supplier of data;
-(11) at least;
-one of;
-a publication;
-article;
```

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```
-publisher;-distributor; or-an advertisement; and-(12) an indication of copyright.
```

Considering claim 57, there is no support for:

```
-a method of
```

- -controlling a;
- -remote intermediate mass medium program transmitter station;
- -to communicate;
- -mass medium program material;
- -to a remote receiver station;
- -and controlling;
- -said remote receiver station;
- -to deliver an;
- -individualized;
- -mass medium program presentation;
- -said method comprising the steps of;:
- -(1)receiving, at;
- -said remote intermediate mass medium program transmitter station;

```
-mass medium programming;
-to be transmitted by;
-the remote intermediate mass medium program transmitter station;
-(2)delivering;
-said mass medium programming to;
-a transmitter;
-(3)receiving;
-at least;
-one instruct signal at;
-said remote intermediate mass medium program transmitter station;
-said
-at least;
-one instruct signal;
-instructs said;
-remote receiver station to;
-process;
-at least;
-one of a;
-plurality of signal;
-types and to;
```

```
-deliver;
-at least;
-a portion of;
-a multiple media programming presentation;
-(4)communicating;
-said
-at least;
-one instruct signal to;
-said transmitter;
-(5) receiving;
-at least;
-one control signal at;
-said remote intermediate mass medium program transmitter station; said
-at least;
-one control signal;
-controls;
-said remote intermediate mass medium program transmitter station to;
-communicate;
-one of;
-said mass medium programming and;
```

```
-said at least one instruct signal;
-(6) transmitting;
-in accordance with said;
-at least;
-one control signal, from;
-said remote intermediate mass medium program transmitter station;
-an information transmission comprising;
-said mass medium programming and;
-said
-at least;
-one instruct signal;
-(7)receiving;
-at said remote receiver station;
-said information transmission;
-(8) processing said;
-one of;
-said plurality of signal;
-types;
-according to;
-said
```

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```
-at least;
-one instruct signal; and
-(9) delivering;
-at said;
-remote receiver station, said
-at least;
-a portion;
-of one;
-of said;
-multimedia programming presentation and;
-said multiple media programming presentation;
-according to said;
-at least;
-one instruct signal.
```

Considering claim 58, there is no support for:

- -the method of claim 57, wherein
- -said mass medium programming includes
- -at least;
- -one of;

```
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       -audio and;
        -text.
Considering claim 59, there is no support for:
       -the method of claim 57, wherein
       -said mass medium programming includes
       -a television program.
Considering claim 60, there is no support for:
       -the method of claim 57, wherein said
       -at least;
       -one instruct signal includes
       -downloadable code.
Considering claim 61, there is no support for:
       -the method of claim 57, wherein said step of
       transmitting;
       -said information transmission;
       -occurs at;
```

-a scheduled time.

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Considering claim 62, there is no support for:

```
-the method of claim 57, wherein said
```

-at least;

-one control signal;

-controls;

-at least;

-one of;

-a plurality of;

-selective transfer devices at;

-different times;

-at the remote intermediate mass medium program transmitter station.

Considering claim 63, there is no support for:

```
-a method of controlling;
```

-a remote intermediate mass medium programming transmitter station;

-to communicate;

-mass medium programming to;

-at least;

-one receiver station;

-said remote intermediate mass medium programming transmitter station;

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-including; -one of; -a broadcast transmitter and; -a cablecast transmitter for; -transmitting said; -mass medium programming; -a plurality of selective transfer devices; -each operatively connected to; -said one of; -said broadcast transmitter and; -said cablecast transmitter for; -communicating; -said mass medium programming; -a mass medium programming receiver; -for receiving; -said mass medium programming; -from; -at least; -one origination transmitter station;

-a control signal detector;

```
and one of;
-a controller;
-and a computer;
-capable of;
-controlling;
-at least;
-one of said plurality of selective transfer devices;
-said remote intermediate mass medium programming transmitter station;
-adapted;
-to detect;
-the presence of;
-at least;
-one control signal;
-to control the communication of;
-said mass medium programming;
-in response to said;
-at least;
-one control signal; and
-to deliver;
-at said one of;
```

- -said broadcast transmitter;
- -and said cablecast transmitter;
- -said mass medium programming,
- said method comprising the steps of:
- -(1) receiving;
- -said mass medium programming;
- -at said
- -at least;
- -one origination transmitter station;
- -(2) delivering;
- -said mass medium programming to;
- -at least;
- -one origination transmitter;
- -said mass medium programming having;
- -an instruct signal;
- -that instructs;
- -said
- -at least;
- -one receiver station;
- -to process one of;

```
-a plurality of signal;
-types and;
-to deliver;
-at least;
-a portion of;
-a multiple media programming presentation;
-(3) receiving;
-said at least;
-one control signal;
-said
-at least;
-one control signal;
-controls;
-at the remote intermediate mass medium programming transmitter station;
-the communication;
-of said mass medium programming; and
-(4) transmitting;
-said
-at least;
-one;
```

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```
-control signal to said;
```

- -one of a broadcast transmitter and;
- -said cablecast transmitter;
- -before;
- -a specific time.

Considering claim 64, there is no support for:

- -the method of claim 63, further comprising
- -the step of
- -embedding;
- -a specific one of said;
- -at least;
- -one;
- -control signal; and
- -said instruct signal in;
- -a signal;
- -containing;
- -said mass medium programming;
- -before transmitting;
- -said mass medium programming to;

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-said remote transmitter station.

```
Considering claim 65, there is no support for:
```

the method of claim 63, wherein said

- -at least;
- -one;
- -control signal comprises one of;
- -a code;
- -and a datum;
- -which operates;
- -at the remote intermediate mass medium programming transmitter station to;
- -identify;
- -said mass medium programming,
- -said method further comprising the step of:
- -transmitting;
- -a schedule which;
- -operates at the remote intermediate mass medium programming transmitter station to;
- -communicate;
- -said mass medium programming to;
- -said one of;

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-said broadcast transmitter and;

-said cablecast transmitter at;

said specific time.

Finally for written description and considering the totality of the *alleged pending claim* support, the *alleged pending claim support* is replete with discrepancies:

-within the alleged pending claim support; and

-between Appendix B and the remainder of the alleged pending claim support.

Suggestion is made for Applicants to reconcile the discrepancies, element by element, in the same spirit of the above described steps 1)-5).

8. Claims 2-8 and 46-49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Whether a specification provides an enabling disclosure for claimed subject matter is a question of law.

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3 8 A

Considering claims 2 and 44-47, they use the term 'digital' and recite digital datum (claim 2 step 3), 'digital television signal' (claim 46 lines 1-2 and 3), and 'digital information channel' (claim 47 lines 1-2), respectively. However, the claims are not found to be enabled in view of the discussion given below as to the level of skill of the ordinary artisan at the time the '87 C.I.P. disclosure was made. (As per an earlier agreement, copies of the "prior art" cited in this paragraph have not been provided with this Office action since such copies were previously provided in copending application S.N. 08/499,097).

I. Applicants have now presented claims which are directed to the distribution of "digital television signals" as was allegedly described by applicants '87 C.I.P. disclosure. The following is noted:

As originally disclosed in the '87 C.I.P., it is apparent that Applicants used the terminology "digital television signals" to refer to television signals which represented conventional television programming and which comprised digitized audio and video signal components (see "Example #7" which begins of page 288 of instant disclosure). However, in the '87 C.I.P. disclosure as originally filed, Applicants' clearly lacked any specific description as to how:

a) the "digital television signals" of Applicants' alleged invention(s) were to have been formatted for transmission over a television distribution system using the method(s) that are now recited in the pending claims; and

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b) as to how the transmission circuitry of Applicants' alleged invention(s) was modified and/or configured for the purpose of handling "digital television signals" in the matter that is now recited in the pending claims.

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Apparent justification for the lack of such descriptions seems to be based on:

1) the allegation made by Applicants' original '87 C.I.P. disclosure that "digital television signals", of the type described therein, were well known in the art at the time of Applicants' alleged invention (note lines 30-33 on page 288 of applicants' disclosure); and 2) on the apparent assumption that the "digital television signals" of Applicants' disclosure could be handled/transmitted in a manner that was interchangeable with the handling and transmission of conventional analog television signals. Hence and on the basis of these substantiated facts, Examiner legally concludes that such allegations and assumptions, made at the time of Applicants' alleged invention, are respectively false and erroneous.

The Examiner emphasizes that he does not dispute the fact that broadcasting digitally

¹For example, the original '87 C.I.P. disclosure described portions of Applicants' alleged invention(s) as having operated to transmit digital television signals over a TV channel during a first period of time and as having transmitted analog television signals over said same channel during a subsequent period of time (see lines 1-5 on page 302 of Applicants' instant disclosure). However, no discussion as to any difference in the handling of the two different television signals by the alleged invention(s) was ever provided, suggested, or recognized by Applicants' original '87 C.I.P. disclosure).

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formatted television signals was in fact well known to those skilled in the art at the time of Applicants' alleged invention. Specifically, the Examiner acknowledges that the transmission of digital television signals was known in the art when, under "rare" circumstances, a transmission channel of sufficient bandwidth was available. However, it is noted that the transmission of these conventional digital television signals was not interchangeable with the transmission of analog television signal as assumed by Applicants' original '87 C.I.P. disclosure because of the extremely large bandwidth that was required to transmit conventional digital television signals; i.e. this was true even when the digital television signals had been compressed using state of the art bandwidth compression techniques [1] [2] [3].

Given the above, the Examiner maintains that the description found in Applicants' original '87 C.I.P. disclosure pertaining to the transmission of "digital television signals" using Applicants' alleged invention(s) was insufficient to have enabled the pending claims using the terminology. Specifically and based on these substantiated facts, it is legally concluded that Applicants' original '87 C.I.P. disclosure at least failed to disclose and describe the manner in which the recited "digital television signals" had to have been formatted and processed so as to have enabled them to have been handled in the manner that was originally described in the '87 C.I.P.; e.g. the manner that now seems to be claimed.

In view of the above, Applicants are hereby requested to submit evidence (e.g. a US

Patent or a printed publication) which support the allegations and assumptions on which

Applicants' original '87 C.I.P. disclosure was clearly based; i.e. references which show the means

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needed to format and transmit "digital television signals" in a manner required by

Applicants' disclosed/claimed invention(s) were in fact well known to those skilled in the art at the time of Applicants' alleged invention.

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- II. The Examiner notes that even those sections of Applicants' original '87 C.I.P. disclosure which were directed to the transmission of "digital television signals", e.g. "Example #7" which begins on page 288 therein, provide few clues as to how the recited "digital television signals" were formatted, handled, and transmitted by Applicants' alleged invention(s) in order to have enable them to have been processed in the manner that is now set forth in the pending claims. For example, the description of Applicants' alleged invention(s) failed to explain:
 - 1) how the "digital television signals" of Applicants' alleged invention(s) were formatted and/or compressed so as to have enabled them to have been handled, transmitted, and/or processed in the manner that is now recited in the pending claims;
 - 2) how the "digital television signals" of Applicants' alleged invention(s) were formatted and/or compressed so that they could be transmitted over the same TV channel that was used to carry conventional analog TV broadcasts as originally disclosed (see lines 1-5 on page 302 of Applicants' disclosure);
 - 3) how the subscriber stations of Applicants' alleged invention were modified in order to have handled/processed "digital television signals" in the manner that is now claimed;
 - 4) how the "SPAM" messages of subscriber stations were to have been embedded in the "digital television signals", how said "SPAM" messages were to have been carried by said

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digitally formatted television signals, and how said "SPAM" messages were to have been extracted from digitally formatted televisions signals;

5) how the bit-rate of the "SPAM" messages that were carried by said digital television signals was related to the bit-rate of the digital television signals into which they were embedded and how this bit rate related to the bit-rate of the "SPAM" signals that were carried in the analog television signals and how the disclosed/claimed system was configured to handle any such differences (e.g. while not addressed by Applicants' original disclosure, it appears that the conventional differences between the bandwidth of digital television signals and analog television signals would translated into respective difference in the bit-rate of the "SPAM" messages that were embedded in respective ones of the two types of television signals).

III. On the basis of the substantiated facts set forth in parts "I" and "II" above, the Examiner legally concludes that the pending claims which are directed to the handling/transmission of "digital television signals" were not enabled by Applicants' '87 C.I.P. disclosure because the allegations and assumptions, on which the disclosed handling and transmission of such digital television signals was based, were respectively false and erroneous. The Examiner legally concludes that these pending claims represent an invitation to experiment when read in the context of the state of the "digital television signal" transmission art which actually existed at the time of Applicants' alleged invention; i.e. the technology required to have handled/transmitted "digital television signals" in the manner that was disclosed, and thus in the manner that is

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apparently claimed, does not appear to have existed at the time of Applicants' alleged invention.

- [1] The publication "Digital Television Transmission With 34 Mbit/s" by <u>Burkhardt et al.</u>
 evidences a conventional transmission system in which a Television signal was broadcast in a
 digital format (see Figure 2). Even though the bandwidth of the digital television signal was
 compressed prior to transmission, said digital signal still required a 22 MHZ transmission channel
 (see the second paragraph under the heading "Bit-Rate Reduction" on page 244); i.e. wherein a
 bandwidth of 22 MHZ is almost 4X that of a standard 6 MHZ TV channel used for analog
 television signal transmission.
- [2] The US Patent No. 3,755,624 to <u>Sekimoto</u> evidences a conventional system in which a television signal was digitally formatted and bandwidth compressed prior to broadcast. The resulting bit-rate of this compressed digital television signal was 32 Mbit/s which required a bandwidth more than 3X that of said standard 6 MHZ Tv channel.
- [3] The US Patent No. 4,742,543 to <u>Fredericksen</u> illustrates a system in which a television signal was processed on the transmitter side of a broadcast system in a digital data format (see figure 1). However, prior to broadcast, <u>Fredericksen</u> converted the digital television signal back into an analog signal format (@33). Such D/A conversion was described as having been necessary because the standard analog TV channel that was used to transmit the television signal was not of sufficient bandwidth to carry the signal in it's digital format (note lines 18-23 of column

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5). This provides further substantiated facts for why the conventional "digital television signals" could not have been handled in the manner described by Applicants' as their alleged invention(s) without undue experimentation.

Enablement cont...

- 9. Claims 9-12, 35-39, 49, 52, 53, and 56 (and all claims depending therefrom and each use of the term 'data') are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Likewise, see claims 2, 4, 9, 45, 47, 56, and 65 (and all claims depending therefrom) for use of the term 'datum'.
- a) As originally described in the '87 C.I.P., Applicants' written description described a method for formatting various types of digital control and display data segments called: "SPAM Messages". Once formatted, the "normal locations" of television and/or radio programming were embedded within the SPAM Messages so as to have created a combined signal which was then transmitted through a 'conventional radio channel' or a 'conventional television channel' wherein the "normal location" was described as 'the vertical blanking interval' of a television video signal.
- b) As also originally described in the '87 C.I.P, Applicants' disclosure contained broad statements which suggested that said *SPAM messages* could be embedded within the "normal

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locations" of other types of programming besides radio and television programming. Specifically, the '87 C.I.P. also disclosed that the SPAM messages could be embedded within the "normal locations" of "other media" such as broadcast "data" or print (see the last line on instant page 35; lines 17-20 on instant page 71 and lines 7-9 on instant page 72). However, these statements are found to contradict the alleged invention as described by the later described so called "more precise" teachings (see lines 17-20 on instant page 72).

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In the alleged "more precise", Applicants' explicitly taught that it was the other media which is embedded within the information portion of said SPAM messages. Hence the contradiction:

-first Applicants teach that said SPAM messages are embedded within the "normal locations" of said "other media"; but later they teach

-it is the other media that is embedded within the information portions of said SPAM messages!

The disclosure, by these substantiated facts, has caused Examiner to legally conclude that the written description related to the term "data" is so contradictory to the point that it would have required undue experimentation in order for the ordinary artisan to practice the alleged invention.

The Examiner notes that the preceding discussion is supported by the fact that all concrete examples of system(s) and method(s) which were specifically illustrated in Applicants' original disclosure were consistent only with said more precise teachings.

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c) As is evidenced from parts "a)" and "b)" of this paragraph, Applicants' original '87

C.I.P. disclosure did describe system(s) which formatted, transmitted, received, processed, and/or displayed radio and television program units under control of, and/or along with, embedded "SPAM messages". However, as evidenced in parts "a)" and "b)" of the above, Applicants' disclosure did not describe system(s) and method(s) which formatted, transmitted, received, processed, and/or displayed "data" program units under control of, and/or along with, associated SPAM messages because data program units (i.e. as the terminology "data" was coined and used within Applicants' written description) were actually transmitted with said SPAM messages. Specifically, the Examiner maintains that said more precise teachings of Applicants' own disclosure evidenced that the handling of the radio and television programming program units by the disclosed system(s)/method(s) was different from, and was non-analogous² with, the

²The Examiner notes that if the disclosed SPAM signals were simply embedded within the digital data stream(s) of *other media*, as they were embedded within the television and radio programming, the ability of the disclosed "processors" to detect and synchronize themselves to the *SPAM signals* would be destroyed because the "cadence" used and required by the disclosed processors for synchronization purposes would no longer have existed; e.g. the start of a new *SPAM message* would not always have followed an "end-of-field" (EOF) signal as was required by processors in all of the embodiments of Applicants' disclosure. However, it is noted that such a synchronization problem was clearly avoided when the other media was carried within the SPAM messages as appears to have actually been taught by the *more precise* teachings of

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disclosed handling of *data* by the disclosed system(s)/method(s). More Specifically, said *more precise* teachings of Applicants' original disclosure evidence the fact that only TV and radio programming was carried in the form of said described *program units*, while said "data" was carried as information packets <u>located within said SPAM messages themselves</u> (see part "b)" of this paragraph).

d) Given the substantiated facts set forth in "c)" above, the Examiner legally concludes that the recitations of pending claims 56, 58-59, 62-65, 69, 75, 77, 79, 81, 85, 101, 109-110, 112, 115, 122, 126, 129, 141, 146, 151, 152 were not enabled by Applicants' '87 C.I.P. Specifically, the Examiner finds the facts that Applicants' disclosure at least failed to set forth the means and/or steps needed to make and use system(s)/method(s) in which recited "data" were formatted, transmitted, received, processed, and/or displayed in the manner which was explicitly disclosed/exemplified for television and radio program units. Specifically, in Applicants' written description, the disclosed system(s) and method(s) for formatting, transmitting, received, processing, and/or displaying said television and radio program units were incompatible with system(s) and method(s) which would have been needed to format, transmit, receive, process, and/or display program units comprised of "data". More, specially, it is maintained that "data" (as coined and used within Applicants' written description) could not be processed in the same manner that was described for television and radio programming program units as now appears to be claimed in claims 9-12, 35-39, 49, 52, 53, and 56.

Applicants' disclosure (again, see lines 17-20 on page 72).

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Clarification is needed.

10. Claims 2-65 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed.

The instant case is like <u>In re Ruschig</u>, 379 F.2d 990, 154 USPQ 118 (C.C.P.A. 1967) where the judge's analysis is found to be appropriate to Applicants' claims.

It is an old custom in the woods to mark trails by making blaze marks on trees. It is no help in finding a trail or in finding one's way through the woods where the trails have disappeared-or have not yet been made, which is more like the case here-to be confronted simply by a large number of unmarked trees. Appellants are pointing to trees. We are looking for blaze marks which single out particular trees. We see none... Working backward from a knowledge of chlorpropamide, that is by hindsight, it is all very clear what route one would travel through the forest of the specification to arrive at it. But looking at the problem, as we must, from the standpoint of one with no foreknowledge of the specific compound, it is our considered opinion that the board was correct in saying: "Not having been specifically named or mentioned in any manner, one is left to selection from the myriads of possibilities encompassed by the broad disclosure, with no guide indicating or directing that this particular selection should be made rather than any of the may other which could also be made".

Ruschig, 154 USPQ at 122-123.

Applicants' disclosure addresses a variety of claim limitations with varying degrees of specificity. However, Applicants' disclosure provided insufficient blaze marks to motivate the assembly of those limitations into the pending claims currently being examined. Notwithstanding, the scattering of teachings across multiple applications in the chain of continuity, under the facts of the instant application, constitute either (1) an affirmative concealment of the best mode of carrying out Applicants invention (Randomex, Inc. v. Scopus Corp., 849, F.2d 585, 7 USPQ)

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1050 (Fed. Cir.. 1988)), or (2) a total failure to be in possession at the time of filing of what is now claimed. Examiner finds (2) to be the instant case as explained above. However, assuming arguendo (2) is not the instant case, the following facts are substantiated for (1).

Considering claims 2-65, assuming arguendo that pending claims are supported 'through' the '87 disclosure so as to benefit from the '81 filing date (it has already been noted that Examiner has not been able to find support). Moreover, assuming arguendo that Examiner has not misunderstood the alleged pending claim support, then the alleged pending claim support seems to have been hidden. Hence, Examiner raises the question of whether Applicants originally disclosed their best mode. The above defined alleged pending claim support is hereby referenced for evidence of concealment. The instant '526 specification is analogous to the Ruschig 'woods'. Examiner does not find sufficient blaze marks in the woods. The alleged pending claim support tables are considered little to nothing more than attempts by Applicants to provide the originally absent blaze marks at a later time.

Examples of missing blaze marks are found with respect to 'data', 'pending claimed processes as a whole', and 'digital'. Specifically considering claims a referenced 9-12, 35-39, 49, 52, 53, and 56 (and all claims depending therefrom), assuming arguendo that the term 'data' can somehow show (2), question is also raised here as to whether Applicants disclosed their best mode. The term 'data' was hidden within the woods by a 'circular description'. Clarification is sought with respect to: the 'woods' of the instant disclosure; and the later offered 'blazes' of the alleged pending claim support).

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Regarding 'pending claimed processes as a whole', Examiner cannot recognize the pending claimed processes within the 'woods' (reference written description discussion above). There were no originally disclosed blaze marks to point the way. Hence, Examiner raises the question of whether Applicants originally disclosed their best mode. Likewise, question is raised for whether the best mode, for the 'digital' recitations, was originally disclosed because there were no blaze marks showing how to use the 'digital' features (claims 2, 46, 47 and their dependencies).

Clarification is sought with respect to: the woods of the instant specification; and the later offered blazes of the *alleged pending claim support*.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 2-65 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which Applicant(s) regard as their invention. Evidence that claims 2-65 fail(s) to correspond in scope with that which Applicant(s) regard as the invention can be found in *the alleged pending claim support*, Applicants have stated that the claims are supported by passages, sentences, and paragraphs that do not exist in the instant disclosure in pages 1-557, and this statement indicates that the invention is different from what is defined in the claim(s) because the claim support

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must be found in instant pages 1-557 (see above). As Applicants have acknowledged that the cited passages were not specifically or expressly incorporated by reference, and as examiner cannot find the alleged inventions when considering pending claims as a whole, Examiner finds that the pending claims 'fail to claim Applicants' invention'... 'the invention necessarily must be described by instant pages 1-557'. Suggestion for traversing this rejection: please clarify what support the claimed invention has within the instant disclosure regardless of the '81 disclosure.

13. Claims 2-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention.

However, because Applicants' are not entitled to recapture, at a later date, that which they have left behind earlier when presenting the '87 C.I.P. disclosure (reference the discussion above describing 'the significance of incorporation by reference and lack thereof'), the metes and bounds of the corresponding pending claims too are found indefinite. Such terms include: 'programming'; 'instruct'; 'instructions'; and 'information'.

14. Moreover and considering claims 2-65, it is noted that, under section 112-2, a method claim must be drafted so as to 'actively manipulate' lest they be indefinite.

However, throughout the pending claims, 'use' language seems prevalent

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Suggestion is made to provide an enumerated list detailing what steps

Applicants consider 'active manipulation' steps vs the remaining 'use' recitations.

See Ex parte Erlich, 3 USPQ2d 1011 (Bd. Pat. App. & Int., 1986).

Considering claims 2-6, 9, 12-14, 16, 18, 21, 27, 45-46, 52, 55-59, and 63-65 (and depending claims therefrom), they use the term 'programming'. Claims 2, 13, 16, 21, 28-29, 42, 44, 56-57, 59, and 62' (and depending claims therefrom) use the term 'program'.

The '81 and '87 C.I.P. disclosures define the terms differently so that it is not clear whether the old definition is present now or whether it was 'left behind' so that the claims can be constructed properly. Clarification is requested.

The examiner notes that the original '87 C.I.P. disclosure of the present application defines the terminology "programming" differently than the '81 disclosure (of Application S.N.06/317,510). Specifically:

- a) The Original disclosure of the present application explicitly defined the term "programming" to mean: "everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, and computer programming as well as combined medium programming" (see lines 5-8 on page 11 of the present written description); while in contrast
- b) The '81 disclosure (of Parent Application 06/317,510) explicitly defined the same terminology to mean: "everything transmitted over television

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or radio intended for communication of entertainment or to instruct or inform" (see lines 4-7 in the abstract of US patent 94,694,490).

- I. With respect to the terms "program" and "programming" as recited in the pending claims:
- A) As it relates to the broadcast and transmission art, the term "program" is defined by the Second College Edition of the 'American Heritage Dictionary" to mean: "a scheduled radio or television show". This conventional definition of the term "program" seems to be consistent with Applicants' use of the terminology throughout the '81 disclosure. However, this conventional definition is clearly inconsistent with the definition given to the term "programming" via the original disclosure of the present application (see the preceding paragraph of this Office action).
 - B) While Applicants may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term, In re Hill, 161 F.2d, 367,73. USPQ 482 (C.C.P.A. 1947). The examiner maintains that the use of the terminology "programming" and "program" in pending claims (enumerated above) is repugnant to what was the normal/usual use of the terminology. Appropriate correction is required.
- 15. Considering claims 2, 8-9, 12-13, 20-21, 45, 47, 49, 51, 55-57, they use the term 'information' (see above). The metes and bounds of the claims are not definite

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because: the '81 and '87 C.I.P. disclosures define the terms differently so that it is not clear whether the old definition is present now or wether it was 'left behind'.

Clarification is requested.

- 16. Considering claims 2-65, they are replete with recitations of 'terms whose definitions are different/diverse', in each case the metes and bounds of the corresponding claims are found not definite. Moreover, because Applicants have failed to demonstrate support for each term, step, and process containing each term and step, what Applicants consider their invention is found not definite.
- 17. Claims 2-65 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

-all independent claims (including claims 2, 9, 13, 18, 21, 31, 42, 45, 55, 57, and 63) and those claims depending therefrom, seem to mix and match '81 and '87 disclosed embodiments when respective entire claim trees are considered. Suggestion is made to specifically enumerate which claim trees are considered directed toward an '81 embodiment and which are directed toward an '87 embodiment if Applicants disagree with this observation.

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Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

-Whether a claim is novel is a question of fact.

Entitlement to a filing data does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed (see 112 1st above). Pending claims are found to be merely 'partially supported' by the 'processes that were originally disclosed' in the '87 C.I.P. However, in order to be entitled to any effective filing date, pending claims must be 'fully supported' by the 'processes that were originally disclosed' in the '87 C.I.P.

The instantly claimed new matter, found to prohibit entitlement to any effective filling date, is found to fall under two rubrics. Under the first rubric, pending claims seem to recite alleged inventions using 'terms and phrases of obvious new matter'

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which (regardless of Applicants intentions) are found to 'create an illusion that obvious type double patenting does not exist' when compared to monopolies already enjoyed by Applicants (see rejection below under obvious type double patenting as the claims are best understood). Under the second rubric, the pending claims recite 'obvious and otherwise new matter' which seem to read squarely on 'DirectTV' displays even though the pending claims are not afforded an effective filing date which precedes the earlier DirectTv like patents (example; Jeffers et al) filing date.

The 102 rejections below, while also applied to circumstances of the second rubric, are applied to address the first rubric in the following manner. Examiner first identifies the '87 C.I.P. disclosed preferred embodiment which most closely corresponds to the pending claimed process as it is best understood. Second, with Examiner's best understanding of the identified preferred embodiment, consideration is given for what correlation exists (when there is any correlation) when comparing the identified preferred embodiment with the pending claimed process. Third, to the extent that a correlation has been found, Examiner applies the prior art in rejection. Put differently, each pending claimed process is rejected herein under 102 'to the extent that the originally disclosed preferred embodiment actually supports the pending claimed process'.

When the prior art thus applied teaches a claimed process fitting the second rubric, the prior art is also applied. It is because the PTO has a policy for providing

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compact prosecution, has Examiner spent time considering and rejecting pending claimed new matter with reference to the alleged effective filing date even though the pending claims are found not entitled to the alleged effective date. Hence, it cannot not be stressed strongly enough, that the most important issue for Applicants is demonstrating support "....in such full, clear, concise, and exact terms...." as is required under the law of 35 U.S.C. 112 1st paragraph, if Applicants wishes to benefit from the alleged effective filing date.

Moreover, for the benefit of clarifying the issues of art rejections and for the purpose of laying to rest any doubts that the Patent and Trademark Office follows different claim interpretation rules than the courts, pending claims have been given their 'broadest reasonable meaning' in 'their ordinary usage'.

18. Claims 2-65 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. patents 4,694,490 and 4,704,725 which contain the cited '81 embodiment.

Note, this rejection, under 35 U.S.C. 102, is caused by Applicants choice to cite passages that did not exist in the original '87 C.I.P. disclosure pages 1-557.

Considering claims 2-65, it is found that pending claims are not entitled to any filing date as explained above. In any event, Applicants allege that the cited '81 embodiment supports pending claims (per alleged pending claim support hereby incorporated by reference into this rejection). However, the cited '81 embodiment, in

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the present circumstance, is found inadequate for demonstrating 'full support' for the pending claims.

Applicants have acknowledged, in interview, that they did not specifically or expressly incorporate by reference into the '87 C.I.P. disclosure, the same passages, paragraphs, and sentences of the *alleged pending claim support* even though he has alleged that they provide full support for the pending claims.

Given such circumstances, it is preliminarily found that the alleged pending claim support is a kind of 'prior art road map'. The pending claims are rejected on the basis that the cited '81 embodiment was not disclosed in the '87 C.I.P. disclosure; and on the basis that the corresponding passages, sentences, and paragraphs were patented more than 11 years prior to later introducing the pending claim 2-65, alleged by Applicants to be pending claim support, into the instant file wrapper (the alleged pending claim support corresponding to the cited '81 embodiment, was patented on both Sept. 15, 1987, and Nov. 3, 1987, in U.S. patents 4,694,490 and 4,704,725).

19. Claims 2 and 4-65 are rejected under 35 U.S.C. 102(a, b, and e) as being clearly anticipated by any of Campbell et al (102a for PCT & e/b for Aban. Parent Appl. No. 135,987). For convenience, reference will be made to corresponding

Regarding Campbell et al: the PCT publication date, noted on the front page of Campbell et al is October 15, 1981. For this reason, Campbell et al is considered a

Campbell et al (U.S. patent no. 4,536,791)('791).

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102a reference. However, the effective priority of the material sourced for purposes of this rejection dates to the filing of the corresponding abandoned C.I.P. grant parent application no. 135,987, filed March 31, 1980. What was added in the C.I.P. of issue, is disclosure corresponding to Figures 2a, b, and 14-17 of the '791 patent. Because, the rejection herein relies on Fig's 1, 2, and 3-13, and corresponding written description and not Fig.'s 2a, b, and 14-17, the effective filing date of the teaching subject matter relied upon for this rejection in the '791 patent is March 31, 1980. A copy of the abandoned grand parent was provided in application 08/468,641.

Considering claims 2-65, they are considered herein in reference 'to the extent that true support is found' in the '87 C.I.P. disclosure, even though Applicants allege differently (see alleged pending claim support).

With regard to Campbell et al and specific points raised by Applicants with respect to the Remarks of Amendment E a.k.a. instant paper no. 22 with respect to pending claims 2-20 and all other claims to which the same points pertain. The organization taught by Campbell et al is at least taught by the Campbell et al combined programming presentation of audio, teletext, print, video, and graphics.

Regarding any issues related to art of rejection. The former action provided extensive and pedantic explanation as to how Campbell et al (and other references of

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rejection) provide suggestions on which the broadly recited claim language read, per interpretation. However, Applicants are reminded, for example, that the remarks of Amendment C were little to more than entirely silent to the rejection, and interpretation of the claim language set forth in the corresponding office action. The remarks, thus generally found to lack substance, are responded to herein and once again, with regard to disagreement over 'instruction to coordinate'.

With regards to remarks Applicants have made about Campbell et al, an important point of issue raised by Applicants is...do Campbell et al teach 'instruct to co-ordinate signals' (see Amend C Remarks pg 19 second paragraph)? Examiner rejects Applicants characterization of Campbell et al on this matter. Applicants admit "Campbell merely transmits television program and television control signals to an addressable converter with the capability to control access to the broadcast system on the basis of channel, tier of service and other such criteria" (Remarks pg 19, second paragraph lines 3-6; aside note: the Examiner does not consider the above quotation a complete characterization of Campbell et al). Examiner submits that the wording 'merely', per quotation above, is used too lightly! If the quotation provided and admitted on the record by Applicants, is not sufficient for describing in detail an operation of 'instruct to coordinate' (in conjunction with the inherent nature of origin and function of the signaling depicted in Campbell et al Fig 11) at the receiving end, per a broad but very reasonable interpretation of what the phrase 'instruct to

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coordinate' can reasonable mean, then the Examiner will eat his keyboard! With this admission, Examiner submits that the answer is....Yes, Campbell et al do in deed provide explicit teaching for 'instruct ("transmit...control") to co-ordinate' ("control access to...tier of service").

Next, while former rejections have been tailored to help any reader understand how easily the pending claims read on the art of rejection in an effort to be helpful, the interpretations provided within parenthesis should not be wrongly interpreted as being comprehensive but should be interpreted as being merely exemplary.

Considering claims 2, and 4-65, Campbell et al teach: communicating information at a multimedia receiver station (addressable converter, item 40 Figure 1); the receiver station (addressable converter) containing one or more receivers (item 40 is taught by Campbell et al Figure 6 wherein item 100 receives multimedia signaling); a computer connected to the receiver for processing and communication information (Campbell et al Figure 7 shows dissection of Figure 6 item 104 in which computer 410 of Figure 7 receives video and graphics from Figure 6 item 100); a plurality of output devices (Figure 7 shows the process of channeling information to graphics output circuitry and also to video output circuitry); inputting a subscribers command (Figure 12 item 334 inputs key word) is taught by Campbell et al when subscribers desire to watch special events, higher tiers, or any unauthorized programming; controlling the receiver station to receive a signal (Fig 11 item 200) in response to the key word entry

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(subscriber command) the signal (Fig 11 item 200) comprising a signal (same or different??- either Fig 11 item 200 or Fig 11 item 206 depending on whether 'a signal' is meant to be same or different than previous recitation) which permits operation of the receiver station in a designated media operation (Campbell et al teach that the threshold code be entered by the user, col 14 line 18, which effects signal 200 to comprise a corresponding 206 permitting operation or the receiver station to allow previously ineligible programming); detecting the presence of two or more instruct-tocoordinate signals (a first signal taught by Campbell et al is channel control word signal 200 of Figure 11, the second signal is the event enable word signal 220) at the receiver station; each instruct-to-coordinate signal designating: channel control word designates (1)-a portion of multimedia programming signal to receive by designating tier code (Figure 11, item 200 with item 202) and event enable word signal 200 designates (2)- a portion of a multimedia programming signal to communicate to a memory location wherein items 222, 224, 226, 228 are stored in item 104 (see col 13 line 61 thru col 14 line 8); communicating one or more units of multimedia programming in response to the two-or more instruct-to-coordinate signals (Campbell et al teach that after special event codes are stored in item 104 in response to entry of keyword an activation of channel number 226, that the special program be output to the requesting subscriber). What Campbell et al further teach is television programming displays that promotes a multi-media product or service. For example,

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when there is a commercial it is inherently for the promotion of products. Moreover, there are commercials for special events available on non-authorized channels so that subscribers would become aware of any event of interest and then order that event, ie advertise for the well known purposes of increasing viewership and therefore revenue (both from the subscriber, and if advertising is permitted on those channels then from other advertisers). Campbell et al teach Fig 11 item 216 wherein the receiving station is programmed to allow viewing of some channels but not others (other control words such as address are considered associated identification datum). Campbell et al teach processing received programming based on a predetermined fashion by comparing a requested channel to an authorized channel and then making a decision whether to switch to graphics display and key word entry prompt or to allow viewing of the selected program and channeling video signal to video descrambler (see associated Fig. 12 item 334 and Figure 7 item 101). Campbell et al teach processing subscriber command (entered key word-see Fig 12 item 334) based on said one or more instructto-coordinate signals (the one instruct-to-coordinate signal associated with entered key word signal 200 having the effect on signal 206- see Figure 11). Campbell et al teach processing viewer's reaction (to a prompt for key word entry) based on one of said one or more instruct-to-coordinate signals (the 206 instruct to deny eligibility to some requested programs) and outputting some programming to a second output device (the video/audio output associated with the descrambling path 101 of Figure 7)

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based on inputting and processing (of either the key word, or a change in eligibility threshold). Campbell et al teach processing the subscriber command (key word item 334 Figure 12), and communicating information based on the step of entering the key word to the remote station based on inputting and processing (the hub end remote station monitors those viewed channels via two-way-interactive cabling (col 3 line 24). Campbell et al teach two-way-cable communication specifically from subscriber to remote data collection stations which include: inputting viewers reaction at a subscriber station (prompt for key word entry item 334 Figure 12); receiving at a subscriber station information that designates an instruct signal to process or output to deliver in consequence of specific subscriber input (specific subscriber inputs of eligibility threshold setting or keyword entry allows deliverance of a previously ineligible program to be outputted to the subscriber; determining the presence of specific subscriber input at the subscriber station by processing sand viewers or participants reaction (matching entered key word to predetermined key word by processing entered keyword); processing an instruct signal (word 230 Figure 11) effective to coordinate multimedia programming presentation based on the subscriber input (key word or newly entered eligibility threshold) at the subscriber station in consequence to the step of determining; transferring from the subscriber station to one or more remote data collection stations an indicia confirming delivery of the instruct signal (word 230 Figure 11) from the step of processing or conforming delivery of the same from the

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step of processing (the system monitors viewed programs, col 3 line 24 for purposes which include billing, statistic gathering, etc...). Campbell et al teach storing subscriber instruction to receive one or specific mass medium programs, data, news items, or computer control instructions (the hub end stores tier code item 202 Figure 11, eligibility threshold code item 238 Figure 11, etc... based on subscriber authorization); and receiving one or more specific mass medium programs, data, news items, or computer contorts instruction in accordance with the instructions (col 16 lines 47-59 are taught programs available based on tier code item 202 Figure 11, eligibility threshold code item 238 Figure 11, etc...). Campbell et al teach: the instruct signal (eligibility threshold code) input by the subscriber (col 14 line 18) storing subscriber instruction (event enable word is stored in item 104 see col 13 lines 61 thru col 14 line 8) to process or present one or more mass medium programs; processing or presenting one or more specific mass medium programs with the instruction (when the special event is broadcast then the special event is made available via video descrambling circuitry -Figure 7 item 101). Campbell et al teach that the information with designates a specific subscriber input or said instruct signal (eligibility threshold code) is detected in an information transmission from a data or programming source. The processor taught by Campbell et al is inherently programmed to respond to data from the programming source hub end transmitter. The programs are received. The detector 100 of Figure 6 does detect programming and control signaling wherein both

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data and control signaling and instruct signaling are passed to item 104 of Figure 6. Campbell et al teach controlling the remote intermediate data transmitter station to communicate data to one or more receiver stations, with the remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more signals which are effective at a receiver station to instruct a computer or processor (Campbell et al abstract and Figure 7 processor 410; particularly not that the user of the receiving station enters an eligibility threshold code col 14 line 18 which is effective to allow viewing of pre-authorized programming and hence instruct processor 104 of Figure 6 to control the programming reception); a plurality of selective transmission devices (video device circuitry Figure 7 item 101 or graphics device circuitry Figure 7 item 124); a data receiver (Figure 6); control signal detector (item 104 or internal circuitry of item 104 depicted in Figure 7); controller or computer (item 410 of Figure 7) for detecting the control signaling (depicted in Figure 11) for controlling program output based on the eligibility code 206; receiving instruct signaling item 238 must be received by the transmitter station in order to be transmitted back to the receiver station as illustrated by Figure 11 (see discussion of eligibility code threshold authorization in col 14 line 18); control signals are inherently used to communicate the eligibility threshold code. Moreover, Campbell et al do not teach transmission before a specific time. For example, a specific time is specific the control signal is transmitted. Transmission before that time is the transmission of the control signals

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which precede the specific control signal as well as the transmission of programming before that specific control signal. It is noted that Campbell et al teach the system operator having control over system operations including the instruct signals depicted in Figure 11 wherein the 'origination station' is taught by the station (location) at which the system operator sits and operates. Further, because the console from which the system operator sits and the surrounding area such as the desk, room, etc. and any combination of these elements may be considered the origination station, then the system operator can enter the data for instructing the receiver station into the intended keyboard so as some down line circuitry at that location which can be called the 'origination station' can receive the keyboard input and transmit it via the intermediate station and onto the receiver station. The recitations of 'transfer' are met by the teachings above associated to 'transmission devices'. Campbell et al teach embedding specific one of said one or more control signals within the information transmission between the transmitter station and the receiver station. The embedding of control signaling in the instruction signaling is taught by Campbell et al for entering by the system operator at his origination station for subsequent transmission through the intermediate station and onto the receiver station (see fig 11). Campbell et al teach the grouping that the specific time is a scheduled time as programming taught by Campbell et al is scheduled. Regarding the language of 'transfer devices' (last line) in substitution for "transmitter devices", per discussion above a the end of claim 18, what

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is set forth as transmitter devices in the rejection also reasons on 'transfer devices' per broad and reasonable definition. Campbell et al teach: communication between a transmitter station and a receiver station (abstract); including delivery of media to the receiver station from the transmitter station via a transmitter (it is inherent to the process or receiving programs at the receiver station for the programs to be delivered to a transmitter for transmitting to that receiver station); the transmitter station receives signaling of a eligibility threshold code from the receiver station (col 14 line 18; note Figure 11 shows signaling in the direction of the transmitter station to receiver station including item 238 necessitating that the eligibility threshold was first communicated in the direction of the receiver station to the transmitter station after authorization of a certain eligibility threshold code is given prior to subsequent Figure 11 depiction of the threshold being transmitted back to the receiver station as item 238); the eligibility threshold code or the eligibility code item 206 or item 200 channel control word (considered instruct signaling) operates at the receiver station to coordinate which programs will be viewed upon request based on tier etc....; Campbell et al, per discussion above, do communicate at least one signal of eligibility threshold code in order for it to be transmitted back as item 238. Campbell et al do teach the control signals for controlling communication of the programming. The embedding of one or more control signals in the unit of programming before transmitting the unit to the remote transmitter stations is inherent to Campbell et al

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teachings. Campbell et al teach that the unit of programming comprises audio or text, or video. Moreover, the unit of programming is taught to be a television program by Campbell et al.

Campbell et al teach: communicating information at a multimedia receiver station (addressable converter, item 40 Figure 1); the receiver station (addressable converter) containing one or more receivers (item 40, per Campbell et al teaching, in Figure 6 wherein item 100 receives multimedia signaling); a computer connected to the receiver for processing and communication information (Campbell et al Figure 7 shows dissection of Figure 6 item 104 in which computer 410 of Figure 7 receives video and graphics from Figure 6 item 100); a plurality of output devices (Figure 7 shows the process of channeling information to graphics output circuitry and also to video output circuitry); inputting a subscribers command (Figure 12 item 334 inputs key word) is taught by Campbell et al when subscribers desire to watch special events, higher tiers, or any unauthorized programming; controlling the receiver station to receive a signal (Fig 11 item 200) in response to the key word entry (subscriber command) the signal (Fig 11 item 200) comprising a signal (either Fig 11 item 200 or Fig 11 item 206) which permits operation of the receiver station in a designated media operation (Campbell et al teach that the threshold code be entered by the user, col 14 line 18, which effects signal 200 to comprise a corresponding 206 permitting operation or the receiver station to allow previously ineligible programming); detecting the presence of

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two or more instruct-to-coordinate signals (a first signal is taught by Campbell et al is channel control word signal 200 of Figure 11, the second signal is the event enable word signal 220) at the receiver station; each instruct-to-coordinate signal designating: channel control word designates (1)-a portion of multimedia programming signal to receive by designating tier code (Figure 11, item 200 with item 202) and event enable word signal 200 designates (2)- a portion of a multimedia programming signal to communicate to a memory location wherein items 222, 224, 226, 228 are stored in item 104 (see col 13 line 61 thru col 14 line 8); communicating one or more units of multimedia programming in response to the two-or more instruct-to-coordinate signals (Campbell et al teach that after special event codes are stored in item 104 in response to entry of keyword an activation of channel number 226, that the special program be output to the requesting subscriber). Campbell et al does specifically teach that television programming displays that promotes a multi-media product or service. Campbell et al teach promoting special events available on non-authorized channels so that subscribers would become aware of any event of interest and then order that event, i.e. advertise. Campbell et al further teach (see Fig 11 item 216) the receiving station being programmed to allow viewing of some channels but not others (other control words such as address are considered associated identification datum). Moreover, Campbell et al teach processing received programming based on a predetermined fashion by comparing a requested channel to an authorized channel and

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then making a decision whether to switch to graphics display and key word entry prompt or to allow viewing of the selected program and channeling video signal to video descrambler (see associated Fig 12 item 334 and Figure 7 item 101). Campbell et al teach processing subscriber command (entered key word-see Fig 12 item 334) based on said one or more instruct-to-coordinate signals (the one instruct-to-coordinate signal associated with entered key word signal 200 having the effect on signal 206- see Figure 11). Campbell et al teach processing viewer's reaction (to a prompt for key word entry) based on one of said one or more instruct-to-coordinate signals (the 206 instruct to deny eligibility to some requested programs) and outputting some programming to a second output device (the video/audio output associated with the descrambling path 101 of Figure 7) based on inputting and processing (of either the key word, or a change in eligibility threshold). Campbell et al teach processing the subscriber command (key word item 334 Figure 12), and communicating information based on the step of entering the key word to the remote station based on inputting and processing (the hub end remote station monitors those viewed channels via twoway-interactive cabling (col 3 line 24). Campbell et al teach two-way-cable communication specifically from subscriber to remote data collection stations which include: inputting viewers reaction at a subscriber station (prompt for key word entry item 334 Figure 12); receiving at a subscriber station information that designates an instruct signal to process/output to deliver in consequence of specific subscriber input

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(specific subscriber inputs of eligibility threshold setting or keyword entry allows deliverance of a previously in-eligible program to be outputted to the subscriber; determining the presence of specific subscriber input at the subscriber station by processing sand viewers or participants reaction (matching entered key word to predetermined key word by processing entered keyword); processing an instruct signal (word 230 Figure 11) effective to coordinate multimedia programming presentation based on the subscriber input (key word or newly entered eligibility threshold) at the subscriber station in consequence to the step of determining; transferring from the subscriber station to one or more remote data collection stations an indicia confirming delivery of the instruct signal (word 230 Figure 11) from the step of processing or conforming delivery of the same from the step of processing (the system monitors viewed programs, col 3 line 24 for purposes which include billing, statistic gathering, etc...). Campbell et al teach storing subscriber instruction to receive one or specific mass medium programs, data, news items, or computer control instructions (the hub end stores tier code item 202 Figure 11, eligibility threshold code item 238 Figure 11, etc... based on subscriber authorization); and receiving one or more specific mass medium programs, data, news items, or computer contorts instruction in accordance with the instructions (col 16 lines 47-59 show teachings wherein programs available based on tier code item 202 Figure 11, eligibility threshold code item 238 Figure 11, etc...). Campbell et all teach instruction signal (eligibility threshold codes) input by the

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subscriber (col 14 line 18) storing subscriber instruction (event enable word is stored in item 104 see col 13 lines 61 thru col 14 line 8) to process or present one or more mass medium programs; processing or presenting one or more specific mass medium programs with the instruction (when the special event is broadcast then the special event is made available via video descrambling circuitry -Figure 7 item 101). Campbell et al teach that the information with designates a specific subscriber input or said instruct signal (eligibility threshold code) is detected in an information transmission from a data or programming source. The processor taught by Campbell et al is inherently programmed to respond to data from the programming source hub end transmitter. The programs are received. The detector 100 of Figure 6 does detect programming and control signaling wherein both data and control signaling and instruct signaling are passed to item 104 of Figure 6. Campbell et al teach controlling the remote intermediate data transmitter station to communicate data to one or more receiver stations, with the remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more signals which are effective at a receiver station to instruct a computer or processor (Campbell et al abstract and Figure 7 processor 410; particularly not that the user of the receiving station enters an eligibility threshold code col 14 line 18 which is effective to allow viewing of pre-authorized programming and hence instruct processor 104 of Figure 6 to control the programming reception); a plurality of selective transmission devices (video device

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circuitry Figure 7 item 101 or graphics device circuitry Figure 7 item 124);a data receiver (Figure 6); control signal detector (item 104 or internal circuitry of item 104 depicted in Figure 7); controller or computer (item 410 of Figure 7) for detecting the control signaling (depicted in Figure 11) for controlling program output based on the eligibility code 206; receiving instruct signaling item 238 must be received by the transmitter station in order to be transmitted back to the receiver station as illustrated by Figure 11 (see discussion of eligibility code threshold authorization in col 14 line 18); for control signals are inherently used to communicate the eligibility threshold code. Campbell et al do teach 'a specific time'. A specific time is merely considered the time the control signals are transmitted. Campbell et al teach embedding specific one of said one or more control signals within the information transmission between the transmitter station and the receiver station. Campbell et al teach: communication between a transmitter station and a receiver station (abstract); including delivery of media to the receiver station from the transmitter station via a transmitter (it is inherent to the process or receiving programs at the receiver station for the programs to be delivered to a transmitter for transmitting to that receiver station); the transmitter station receives signaling of a eligibility threshold code from the receiver station (col 14 line 18; note Figure 11 shows signaling in the direction of the transmitter station to receiver station including item 238 necessitating that the eligibility threshold was first communicated in the direction of the receiver station to the transmitter station after

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authorization of a certain eligibility threshold code is given prior to subsequent Figure 11 depiction of the threshold being transmitted back to the receiver station as item 238); the eligibility threshold code or the eligibility code item 206 or item 200 channel control word (considered instruct signaling) operates at the receiver station to coordinate which programs will be viewed upon request based on tier etc....; Campbell et al, per discussion above, do communicate at least one signal of eligibility threshold code in order for it to be transmitted back as item 238 personal schedule; moreover, they teach embedding one or more control signals in the unit of programming before transmitting the unit to the remote transmitter stations is inherent to Campbell et al teachings. Campbell et al teach that the unit of programming comprises audio or text, or video. The unit of programming is taught to be a television program by Campbell et al. Campbell et al teach the claimed subject matter including the display of stock market quotations, news stores, stock quotations etc... (col 16 lines 48-56). Further in consideration of priority, it is noted that the term 'combined' is found to have been first introduced when the '87 C.I.P. disclosure was filed.

20. Claims 2, and 4-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeffers et al (U.S. patent no. 4,739,510).

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Considering claims 2, and 4-65, Jeffers et al teach: processing signals (performing something that incites action conducted to an end on that which conveys notice) in a network including: receiving signaling (that which conducts notice) at a transmitter station (the place or position where transmission occurs which includes, as example, the uplink equipment 20 of Fig 1); generating at least a portion (at least a part of the whole and including the whole) of a processor code module (a standardized unit comprising a system of symbols for communication that incite action conducted to an end; the unit which comprises the header and addressable portions and all of their inherent contents are generated - Fig 3; col 7 lines 9-12) which is effective at a receiver station (the place or position where reception occurs; #38 Fig 1) to control a plurality (more than one) of computer peripheral devices (mechanisms designed to serve a special purpose of auxiliary function for a programmable electronic device; any two or more combinations of the circuitry or parts of the circuitry depicted in Fig's 2a,b including the micro-controller but excluding the microprocessor; col 14 line 49); outputting info to user (the entertainment); establish telephone communications between the receive station and a remote station (the auto dial; col 23 line 17) for the communication of the data to a remote station (billing center computer 14; col 15 line 48); transmitting control signaling ("the addressable portions contain information relating to the control of individual addressed receiving units" col 7 lines 12-14). Jeffers et al teach receiving the processor control module (the header and addressable

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portions are received by the location or area of Fig 1 #38); processing at least a portion of a processor code module to cause the receiver station to control a plurality of computer peripheral devices (any two or more combinations of the circuitry or parts of the circuitry depicted in Fig's 2a,b perform "capturing and storing the control information in the addressed portion"- col 7 line 26; note: more than two memory locations are inherently required to store the amount of control information in the addressable portion; thus the more than two memory locations, inherently necessary to store the control information, are considered a 'controlled plurality of computer peripheral devices' because each memory location is by definition a 'mechanism designed to serve a special purpose of auxiliary function for a programmable electric device'); output information to a user (the entertainment; claim 3); establish telephone communications with a remote station and communicate data to the remote station (the billing center is auto dialed; col 15 line 38, col 23 line 17). Further, Jeffers et al teach receiving at an origination station (place or position where something begins such as the combination or sub-combination of at least two elements of Fig 1 but excluding the receiver side) at least one of signals (the signal, col 7 line 8; the signals include all or portions of information including the combined unit of the header and addressable portions or combination of portions thereof, and the inherence of the repetitive transmission of like signaling and there combinations or portions of their combinations) to be transmitted (from location of #20 Fig 1); receiving at the

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origination station (for example, some of the combination or sub-combination of at least two elements of Fig 1, but excluding the receiver side, are the origin of many signals including the scrambling signals; col 9 line 17) an instruct signal (a first set or subset of segments or a single segment of the 'addressable portions' which constitute "information relating to the control", col 7 lines 13-14) which is effective to accomplish (see sub step 2b) effecting a receiver station (location of #38 Fig 1) to generate at least a portion of a processor code module (note: 'generation' is considered to be the act of producing'; processor control module, defined above, is produced at the receiver station) which is effective at the receiver station to control a plurality of computer peripheral devices; output information to a; establish telephone communications between the receiving station and a remote station for communication data to the remote station; receiving at the origination station a transmitter control signal (the portion of the synchronization signaling inherently required to influence sync at the transmitter that are also conveyed to the receiver for the telling the receiver how to synchronize; the portions used at the transmitter and added to the 'sync information' col 7 line 10; note: synchronization information instructs coordination between the transmitter and the receiver, and therefore inherently operates at both the transmitter and the receiver in the case where it is embedded into the signaling such as taught by Jeffers et al; the portions of sync used at the transmitter and conveyed to the receiver are considered one example of how Jeffers et al teach the recited 'transmitter

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control signal' used to convey all other signaling and included in the conveyed signaling) which operate at the transmitter station (for controlling synchronization) to communicate one of the instruct signals (synchronized to the 'portion of synchronization signaling') and processor code module to the transmitter and transmitting from the origination station the signal, the instruct signal and the transmitter control signal. Moreover, Jeffers et al teach a network (col 1 line 8) including transmitting a signal to at least one of a plurality of stations (the one station is considered to be any one of the chain of receiving stations from station of block 24, the inherence that there can be multiple block 24's, the station satellite B, or any one of the in excess of 16 millions intended receiver stations -col 8 lines 27-28- that have the television sets depicted by Fig 1 combinations items 38, 36, 34, 30, 33, 32, and all other control devices throughout the system which operate to receive signaling); controlling a first transmitter sation based on the signal (the system operator controls signaling of both programming, audio, video, control, etc) which causes a first transmitter station (Fig 1 #20) to transmit the signal (let the signal be the stream of control messages of type 1 in Fig 6a, type 2 Fig 6b, types 3-5 in Fig's 6c-e) wherein there is selection of processor code and telephone number (the code is subscriber address of Fig 5; the telephone number is Fig 6); generating these (inherently followed by the selection); transmitting these (sent out through #20 of Fig 1); controlling a first receiver station (any one of the millions of intended receiving stations.) based on the

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signal (Webster's dictionary teaches that the word control can reasonably mean 'directing influence over'; the control information of Fig 5 thru Fig 6g indeed do have influence over the receiver-note particularly Fig 6F); wherein the control includes the selection of a first portion of a first message contained in the signal such that selected first portion is communicated to an output device (television) for display to the subscriber; controller a second receiver station based on the signal (any one of the other millions of intended receiver stations are controlled similarly to the first discussed above, see col 8 line 28); wherein there is input to a processor the data associated to the establishment of communications to the remote sation wherein at least one of the first and second receiver stations output the billing information in accordance with the code (col 23 lines 13-18). Jeffers et al teach that the output devices are selected (see Fig 6g) wherein output is inherent to the namesake of the output devices which are themselves inherently selected all with 'generally applicable information'. Likewise, Jeffers et al teach that at every receiver station of the intended millions including the second station, the selection of a portion of a data module in response to a user subscriber input (when the subscriber wants to watch a channel, the information associated to that channel such as the video, audio, graphics, text are selected by the user); inputting a subscriber input under control of the processor code see recording of pass code col 11 lines 11-12 (some other processor code taught by Jeffers et al is includes the stored decryption key info Fig 7 bottom right hand corner;

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also see the stored subscriber pass code information -col 14 line 24; or anything not related to the normal subscription service paid for -col 10 lin 57; further the tier authorization is also part of the keying system) wherein the stored processor code regulates the input because if a tier is not approved or a key has been compromised then the subscriber would be regulated in what programming can be watched (see col 3 line 41 thru col 4 line 8). As follows, Jeffers et al teach selecting the output device and controlling a microcomputer to determine whether a subscriber input exists (it is inherent that the circuitry of Fig's 2a,b that include both microcomputer and microcontroller as taught by Jeffers et al is used to determine whether subscriber input exists including the parental control key-see col 14 line 24). Not withstanding, Jeffers et al teach specific subscriber input (parental key, col 14 line 24; also see all the other things discussed above that meet this limitation; and see the disclosure of Jeffers et al for many more); selecting the output device that inputs to the microcomputer (an alternative to the 'output device' which works with and meets the 'output device' is the memories 68, 70, 72, key memory or any combination of these memories wherein there is store of encryption keying-see Fig 7, data stream information etc...broadly languaged recitations are taught by Jeffers et al associated to memory locations; see the disclosure for more things on which this broad recitation reads; Applicants are cautioned here that the although the terms microcomputer and micro controller per broad and reasonable definition can be used interchangeably whether or not Jeffers et

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al assign specific tasks to chips given both names respectively; note for example the combination of the Jeffers et al teach that two chips 'micro-computer' and 'microcontrol' act together to be a single microcomputer; also combinations and subcombinations of the chips of Fig's 2a,b can also meet the limitation 'micro-computer'); selecting the output device that inputs to the microcomputer as well as selecting an input to the microcomputer on the basis of a comparison and inputting to the microcomputer comparison information communicated with the at least a portion of the signal (these limitation are met by the inherent operation of the combined 'authorization list', 'non-authorization list', pass. code entry and comparison, comparison to selection of tiers required by key pad but not authorized or blocked. etc.). And furthermore, Jeffers et al teach the combination that a data module is transmitted (see the header, the addressable portions, Fig's 5-6g for combinations and sub-combinations or sizes small and large which meet this considerably broad relations); receiving the transmitted signal (explained above); selecting information (see above); generating at least a portion of a control module that contains processor code and selected information (see above and the multiple combination and subcombination of signaling that meet these relations); transmitting the control module (see above); controlling further comprising the step of communicating the control module to a process (see above); third step including controlling the output device based on information.

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Further in consideration of priority, it is noted that the term 'combined medium programming' is found to have been first introduced when the '87 C.I.P. disclosure was filed. When used, the term 'combined' seems to limit the effective filing date to that of the '87 C.I.P. See claims 31, 44.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

-Whether pending claims are obvious under 35 U.S.C. 103 are conclusion of law.

-Entitlement to a filing data does not extent to subject matter which is not disclosed, but would be obvious over what is expressly disclosed (see 112 1st above).

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In making the rejections below, the claims have been considered to the extent that true support has not been found within the instant disclosure. Moreover and for the purpose of laying to rest any doubts that the Patent and Trademark Office follows different claim interpretation rules than the court, it is understood that the PTO must give pending claims their 'broadest reasonable meaning' in 'their ordinary usage'.

21. Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Campbell et al or Jeffers et al as applied to claim 2 above, and further in view of Nagel (U.S. patent no. 4,064,490).

Considering claim 3, Campbell et al suggest claimed subject matter including the display of stock market quotations, news stores, stock quotations etc... (col 16 lines 48-56) but does not suggest programming the receiver for portfolio. Likewise, Jeffers et al teach "...FIG. 6G depicts a message type 7.... for displaying stock market transaction information". What Nagel suggests is a receiving station computer for real-time stock portfolio analysis (col 12 line 42). It would have been obvious to one having ordinary skill to combine portfolio analysis suggestions of Nagel with the stock retrieval system and associated news items taught be the prior art for the benefit of a providing the subscriber with an even more informed body of information for which to make financial decisions.

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22. Claims 2-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al or Jeffers et al in view of U.S. patents 4,694,490 ('490) and 4,704,725 ('725).

Considering claims 2-65, it is noted that Applicants have demonstrated support "only" to the "81 case" (see Applicants quotes above). It appears Applicants may believe they are entitled to the 'entire '81 disclosure. However, it clearly was not included in the '87 disclosure nor was it incorporated by reference into the '87 disclosure even though it was included in the '81 disclosure. In view of the above, it is important to consider claims as a whole for identifying whether they happen to mix and match '81 and '87 embodiments, or whether they use '87 disclosed terms/modifiers for being afforded the '87 effective filing date only. For example, if a single claim contains: terminology of an '87 embodiment that modifies an '81 term then such a single claim, when considered as a whole (the whole defines the invention), will be afforded:

-an '87 filing date only (if the '81 and '87 described processes are clearly, concisely, and with exact terms, understood to be compatible);
-no effective filing date (if the '81 and '87 described processes are not (by 112 1st paragraph), clearly, concisely, and in exact terms, considered compatible);
-a 6/7/99 effective filing date only (if the claims can only be fully supported when the subject matter that Applicants "incorporated by reference" is

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considered. (See discussion above describing how Applicants, regardless of their intention, "incorporated by reference the '329 parent "in it[']s entirety" into the instant disclosure).

In any event and specifically for claims which are only afforded the 6/7/99 filing date, what Campbell et al teach and what Jeffers et al teach is described in the rejections above for claims 2-65. To the extent that Campbell et al and Jeffers et al do not teach the claimed invention of claims afforded the 6/7/99 filing date, the difference is found suggested by both the '490 and '725 patents. Provision for the difference would have been obvious for providing greater functionality to the subscriber station.

23. Claims 2-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/02682.

Considering claims 2-65, to the extent that Applicants can satisfy the enablement requirement of 112 1st but not the support requirement, a comparison has been made between a) the *alleged pending claim support* (Examiner incorporates by reference the *alleged pending claim support*) and b) embodiments taught in Applicants' publication of March 23, 1989, by way of WO 89/02682. It is found, even if pending claims can be arrived at with experimentation, then it would most likely be from 'mixing and matching' the WO 89/02682 embodiments. And the ordinary artisan, to the extent that mixing and matching could have been done with undue

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experimentation, would have done so for the benefit of providing greater functionality to the subscriber.

24. Claims 2-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over all of: Campbell et al alone; Jeffers et al; Jeffers et al in view of Examiner's Official notice that the various claimed displays of 'locally generated graphics with remotely generated video were conventionally well known with respect to Direct TV like art (as evidenced by PMC allegation that Direct TV constitutes such displays, see United Stated Court of Appeals for the Federal Circuit Appeal No. 98-1160 decided on Nov. 24, 1998); Campbell et al in view of Zaboklicki (DE 2,904,891); and Jeffers et al in view of Zaboklicki (DE 2,904,891).

In making the rejections below, pending claims have been considered heavily with respect to the second rubric. The pending claims are, however, given their 'broadest reasonable meaning' in 'their ordinary usage'.

Considering claims 2-65, the rejections above are incorporated by reference.

Although the pending claims are not found 'fully' when considering the *alleged*pending claim support, they are nevertheless 'fully' considered. Campbell et al teach
generation of text from a local text graphics generator for overlaying on the Campbell
et al displays a.k.a. 'presentations' and 'multi-media presentations'. Hence, the mere
characterization, of the Campbell et al taught text and video, with terminology such as

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'portions', 'displays', 'multi-media', and 'multi-media presentations' is implicit and to the extent it is not it is obvious for the benefit of greater functionality. The same is found true for what Jeffers et al teach. Moreover, Examiner takes official notice that Direct TV receivers performed the pending claimed presentations before the effective filing date that the pending claims are afforded. Notwithstanding, Zaboklicki teaches the various presentations. In any event, PMC has constructively admitted that they believe DSS broadcasts perform 'video overlays' (see Appeal No. 98-1160 page 25 with respect to the '277 claim 44) "PMC contends that the DSS broadcasts ...is displaying the video overlay' when it comes to Direct TV. Hence, in view of Examiner's official notice (and the finding that the pending claims are not afforded an effective filing date) and to the extent that it is not inherent, it would have been obvious to provide the various claimed displays and presentations in the organized and specifically recited manner for the benefit of providing greater functionality to the subscriber.

Finally, what Zaboklicki teaches was described in the first office action of the co-pending '571 disclosure. Said earlier rejection is hereby incorporated by reference into this rejection. It would have been obvious to modify both Campbell et al and Jeffers et al, respectively, with Zaboklicki for the benefit of greater display and presentation functionality at the user station.

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Double Patenting

25. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887

49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979

109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668

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169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996

229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282

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289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

26. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related copending applications identified above. However, an analysis of all claims in the 329 related copending applications would be an extreme burden on the Office requiring millions of claim comparisons.

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In order to resolve the conflict between applications, applicant is required to either:

(1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;

- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the attached Appendix A are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).
- 27. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (C.C.P.A. 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (C.C.P.A. 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (C.C.P.A. 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or

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patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Whether the pending claims fall under the doctrine of obvious type double patenting is a question of law. Moreover, it is understood that claim construction of patented claims is a question of law even though the underlying basis for both are questions of fact.

-it is understood that patented claims are presumed to invoke 112 6th paragraph when reciting 'means plus function language' such as 'means for'. It is understood that all 'materials and structures' disclosed, for accomplishing the 'recited functions' following the term 'for', necessarily limit the meets and bounds of such claims except when:

-the 'recited function' are later modified by one or more of the corresponding disclosed 'materials and structures' for accomplishing the 'recited functions'.

See Federal Register Vol. 64, No. 146, pages 41392-94 (listed on most recent PTO-892 form and provided with the '571 prosecution). All obvious double patenting rejections have been considered, when appropriate, in light of 112 6th paragraph.

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It is not inappropriate to reject pending claims under the doctrine of obvious type double patenting even when found to contain new matter so long as the pending claims constitute 'obvious new matter'.

28. Claims 2-65 are rejected under the judicially created doctrine of obviousnesstype double patenting as being unpatentable over any single claim or combination of claims:

- -claims 1-13 of U.S. Patent No. 4,694,490 ('490);
- -claims 1-5 of U.S. patent no. 4,704,725 ('725);
- -claims 1-25 of U.S. Patent No. 4,965,825 ('825);
- -claims 1-26 of U.S. patent no. 5,109,414 ('414),
- -claims 1-71 of U.S. patent no. 5,233,654 ('654),
- -claims 1-56 of U.S. patent no. 5,335,277 ('277).

As the alleged pending claim support, Applicants rely upon, the so called '81 Wall Street Week Embodiment' (WSW). The '81 WSW embodiment corresponds to the '81 disclosed Figure 6c and is described in the '490 and '725 patents at col 19 line 31 through col 20 line 11 (48 lines in total).

Even though Applicants have alleged that all of pending claims 2-65 (64 claims in total) are 'fully supported' by the '81 WSW embodiment; Examiner rejects the alleged pending claim support as failing 112 1st paragraph (see above) even if the pending claims are obvious over the alleged pending claim support. However,

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embodiment, it is clear that claims 1-13 of '490 and claims 1-5 of '725 cover the one and same '81 WSW embodiment. Applicants already enjoy a monopoly on the '81 disclosed WSW embodiment in terms of the WSW apparatus via patent '490 claim tree 9-13. In addition, Applicants already enjoy a monopoly on the process performed by the '81 WSW embodiment via '490 claims 1-8 and via patent '725 claims 1-5. Moreover, Patent '490 claim tree 9-13 is so narrow in scope that it is limited to the '81 WSW embodiment's disclosed 'materials and structures' which are to taught for accomplishing the recited functions (as necessarily proscribed under the law of 35 U.S.C. 112 6th paragraph) for each case when the various recited means are not later modified by corresponding material or structure.

As such and further assuming arguendo that the alleged pending claim support is adequate or even (emphasis added) 'almost adequate', it is then legally concluded that under the judge made law of obvious type double patenting, a terminal disclaimer is necessary, since the pending claims merely reflect an obvious variant of the '81 disclosed WSW monopoly for which Applicants have long enjoyed a monopoly. As the comparisons are too numerous to make, Appendix C has been attached.

It is noted that Applicants have previously alleged, in interview, that consideration of what is covered by the combination of Applicants multiple patented

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claims is prohibited when the PTO considers obvious type double patenting.

However, Examiner finds this allegation to be wide of the mark. When considering judge made public policy of obvious type double patenting, Examiner finds it necessary to examine the entire patent coverage already enjoyed for determining whether pending claims are obvious variations. Moreover, when the disclosed best mode is a 'unified system' as it is factually found to be for the present case, consideration of the entire monopoly (already enjoyed) is clearly more proper than a mere consideration of a portion of the monopoly already enjoyed. Notwithstanding, the above described first rubric is revisited. Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed (see 112 1st above) even though what is obvious still falls under the doctrine of obvious type double patenting. Pending claims are not patentably distinct from patented claims and pending claims are dependent upon the embodiments and subject matter for which Applicants already enjoy a monopoly.

The following are findings of fact as the instant disclosure is best understood:

The '87 disclosure described it's best mode in terms of three general embodiments:

1) 'an intermediate station embodiment' (IS). However, Applicants already enjoy a monopoly on IS both in the 112 6th paragraph limited apparatus via

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patent '414 claims 1-17, and via the process performed by IS per '414 claims 18-26;

- 2) 'an ultimate receiver station embodiment' (also having subembodiments) (URS). However, Applicants already enjoy a monopoly on URS both in the 112 6th paragraph limited sense via patent '825 apparatus claims 1-13 as well as process claims via '825 claims 14-25, as well as '277 claims 1-3, 15, 24-26, 31, 38, 52-54, and by broader (and not 112 6th paragraph limited) apparatus via '277 claims 4-14, 16-23, 27-29, 32-37, 39-51, and 55-56;
- 3) a 'monitoring program usage and data gathering thereon embodiment' (MDG). However, Applicants already enjoy a monopoly on MDG both in a 112 6th paragraph sense per '654 claims 1-5, 7-20, 34-36, 51, 57-71, as well a monopoly on the process per '654 claims 6, 21-33, 37-50, and 53-56.

Examiner finds that, what often falls under the first rubric described above, is that Applicants have simply drafted (regardless of their intention) a pending claim so as to constitutes nothing more than a mixing and matching of the one or more of thee three best mode embodiments that have already been patented. Moreover, each already patented best mode embodiment 1)-3), necessarily requires the other two already patented best mode embodiments:

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-as strictly set forth by Applicants when making the '87 disclosure per their best mode; and

-as required when giving proper 112 6th paragraph claim construction to the patented terms;

Hence the unified system.

To the extent that patented claims do not already cover the pending claimed broader processes, to draft them at this late time, would have been obvious for the benefit of extending the unified system monopoly already enjoyed. Examiner finds the pending claims to be dependent upon and non-distinct (non-obvious) from patented claims.

29. Claims 2-65 are rejected under the judicially created doctrine of obviousnesstype double patenting as being unpatentable over any single claim or combination of claims:

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-claims 1-13 of U.S. Patent No. 4,694,490 ('490);
-claims 1-5 of U.S. patent no. 4,704,725 ('725);
-claims 1-25 of U.S. Patent No. 4,965,825 ('825);
-claims 1-26 of U.S. patent no. 5,109,414 ('414);
-claims 1-71 of U.S. patent no. 5,233,654 ('654)
-claims 1-56 of U.S. patent no. 5,335,277 ('277)
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in view of each combination of art described within this action.

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Considering claims 2-65, the rejections above are incorporated by reference into this rejection as is the teachings of prior art with respect to 'digital' as well as with respect to the 'Level of Skill' discussion below. It is clear that no pending claim is more than an obvious variation of the patented claims when the teachings discussed throughout this action are considered. Examiner finds that Appendix C demonstrates that pending claims are obvious variants over the patented claims. However, assuming arguendo, they are not. The differences are suggested by the art discussed within this action (see above; see below). The provision of any such differences would have been obvious for the benefit of providing greater functionality to the user.

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Level of Skill In the Art

The following discussion has been provided to establish the level of skill in the art which existed at the time of Applicants' alleged invention and, therefore, to set forth the context in which the applied prior art of record must be viewed.

1. The examiner notes that local television broadcast stations, which only served small regional areas of a country (e.g. the USA), often lacked the financial resources required to create enough original television programing to fill their daily broadcast schedules. Thus, these local television stations became "affiliates" of a national television broadcast network (e.g. NBC, ABC, CBS,

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etc,...) whereby the national television network created original network television programming which could be transmitted to, and commonly rebroadcast by, all of the local affiliate stations. This arrangement allowed the cost of creating such original programming to be divided amongst the affiliate stations thereby reducing the cost to any one of the affiliates.³

2. While, in practice, it was feasible to fill the affiliate stations' entire local broadcast schedules with network programming, such was known not to have been desirable. Specifically, there still remained a need to supplement said network programming with locally originated programming tailored specifically to the needs and interests of the local audiences (e.g. local news programs, local commercials, etc,...).

Note: lines 2-9 in the second column on page 806 of the article "The Automation Of Small Television Stations" by Young et al which was published in volume 80 of the "Journal of the

³See, the first 23 lines In the full paragraph on page 85 of the article "Master Control Techniques" by Marsden which was published in volume 9 of the "Journal of the Television Society" in 1959.

⁴ Note the first 23 lines in the second full paragraph of page 85 of the article "Master Control Techniques" by Marsden which was published in volume 9 of the "Journal of the Television Society" in 1959.

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3. To accomplish the above, an arrangement was established in which a national broadcast station would broadcast network programming to all of it's affiliate stations in accordance with a strict network broadcast schedule. This strict network broadcast schedule included scheduled "breaks" in the network programming which were then made available to the local affiliate stations for the purpose of inserting locally originated programming. This locally originated programming was known to have included previously broadcast network programming which had been recorded for delayed rebroadcast. The resulting combined programming was then broadcast to the local audiences of the affiliate stations.

4. Early on, the local affiliate stations produced and inserted their own local programming into the network programming via a switching network which was controlled manually by local technicians. However, as technology

SMPTE" in October of 1971.

⁵Note the last 11 lines on page 810 of the article ... "The Automation Of Small Television Stations" by Young et al, which was published in volume 80 of the "Journal of the SMPTE" on October of 1971.

⁶See lines 25-41 in column 4 of U.S. Patent 4,025,851 to <u>Haselwood et al.</u> which was published on May 24, 1977.

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progressed, methods for automating various aspects of the program insertion/switching process developed. Such developments included:

- 1) The development of automatic scheduling computers which could be programmed to execute a list of scheduled programming events whereby the list of events automatically controlled tile sequence in which scheduled programming was produced and broadcast from a respective broadcast. Such computers were used to automate both the network television stations and affiliate television stations.⁷
- 2) The development of automated program cuing systems which include: equipment located at the national network for embedding cuing signals into the broadcasted network programming whereby said cuing signals identified the beginning and the end of each scheduled

Note: U.S. Patent #3,761,888 to Flynn which was published on 9/25/73.

Note: U.S. Patent #3,627,914 to <u>Davies</u> which was published on 12/14/71.

Note: the publication "Microprocessor For CATV Systems" by Tunmann et al. Which was Published by the Tele-Engineering Corp on 4/30/1978.

⁷ Note: the last 11 lines on page 810 of the article "The Automation Of Small Television Stations" by Young et al. which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

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"break" in network programming, and equipment located at the affiliate stations which used the embedded cuing stations to determined the respective beginning and the respective end of each scheduled network "break" and, based on this determination, automatically cause its own scheduled local programming to be inserted into said "breaks" prior to "re-broadcast".8

5. Because ones of the affiliate stations were located in different time zones, equipment was required to compensate the broadcasted network programming for these time zone differences, i.e. if the same network programming was to have been broadcasted at the same local time throughout the entire country. This compensation was accomplished by delaying the broadcasted network programming which was provided to a given one of the affiliate stations, via a network of recording devices, as a function of the time zone in which the given affiliate station was located. Early on, due to the high cost of this delay

⁸See: Australian Patent Document S.N. 074,619 by <u>Hetrich</u> which was published April 29, 1976.

See: U.K. Patent Document S.N. 959,374 by <u>Germany</u> which was published May 27, 1964.

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equipment, compensation was provided only at the central network station.⁹
But subsequently, as the cost of the delay equipment came down and as the use of highly expensive satellite transmission paths increased, said delay equipment began be located within ones of the affiliate station locations.¹⁰ In either of these situations, when network programming was to be delayed in this manner, it was understood that any "program related data" that was carried with the network programming (e.g. such as the network cuing signals, network program monitoring codes; etc,...) also had to be delayed by the delay equipment in order to have maintained the precise timing relationship of such program related data with the said network programming.¹¹

See: the publication "The Digitrol 2 ~ Automatic VTR Programme Control" by <u>Skilton</u> which was published on pages 60-61 of the "International Broadcast Engineer" in March of 1981.

Note: lines 25-41 in column 4 of U.S. Patent 4,025,851 to <u>Haselwood et al.</u> which was published on May 24, 1977.

⁹Note the article "Automatic Control of Video Tape Equipment at NBC, Burbank" by Byloff which was published by the National Broadcasting Company, Inc. in 1959.

¹⁰See: the publication "Video Banks Automated Delayed Satellite Programming" by <u>Chiddix</u> which was published in 1978.

¹¹See: the first 7 lines in the first full paragraph of the third column on page 39 of the

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The following discussion has been provided to emphasize the state of the television:

The following discussion has been provided to emphasize the state of the television/radio broadcast art which existed at the time of Applicants' alleged invention and, therefore, to further exemplify the context in which the applied prior art of record must be viewed. Support for this discussion is derived from the following prior art: 1) the publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al; 2) the Australian Patent document No. 74, 619 to Hetrich; 3) the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson; and 4) the British patent document No. 959,274 to Germany.

A) Contrary to the arguments presented by Applicants in related applications (e.g. S.N. 113,329)¹², it is maintained that the body of art pertaining to the broadcast of television programming the body of art pertaining to the broadcast of radio programming were, and still are, analogous arts. To suggest otherwise is to portray an

publication "Video Banks Automate Delayed Satellite Programming" by <u>Chiddix</u> which was published in 1978.

Note: U.S. Patent 4,025,851 to Haselwood et al. Which was published on May 24, 1977.

¹²The Examiner notes that application S.N. 113,329 has already been cited in the record and therefore its citation by Examiner herein is not prohibited.

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unrealistically low level of skill in the art. The following fats provide evidence as to the analogous nature of these two arts:

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1. First, it is noted that radio programming and television programming were communicated through radio and television distribution networks in the same basic way/format. More specifically, both radio/television distribution networks operated to produce, sequence and distribute radio/television programming to a plurality of household radio/television receivers based on predetermined radio/television broadcast schedules. In fact, the definition of the word program, as it pertains to the broadcast environment, was/is: "a scheduled radio or television show".

2 By the fact that the actual configurations of the radio and television networks themselves mirrored each other element for element. For example, both systems comprised national/network stations and affiliated local/regional stations wherein the local/regional stations operated to selectively rebroadcast network programming, or to broadcast locally produced programming in place of the network programming, to said household receivers. Almost the only different between the configurations of the radio and television networks was that the circuitry needed to implement the television network was of a greater bandwidth than that of the radio network (e.g. the television network used VTRs in places where the radio network used ATRs).;

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3. By the fact that the prior art of record shows that, at the time of Applicants' alleged invention, those of ordinary skill in the art themselves understood radio/television distribution networks to be "analogous arts". For example, this fact is clearly reflected in the teaching of <u>Hetrich</u> that his disclosed control signal distribution circuitry, while described in detail with respect to radio broadcast networks, could likewise have been used within television broadcast networks (see: the first 4 lines on page 2 of the <u>Hetrich</u> document).

B) Television and radio broadcast networks, which comprised a plurality of local/regional broadcast stations affiliated with a respective central/national broadcast station, were notoriously well known in the art at the time of Applicants' alleged invention. The central/national broadcast station of these broadcast networks operated to create national television/radio programming and to broadcast said created programming to ones of its affiliate broadcast stations. Said ones of the affiliate stations received the broadcasted network television/radio programming and then either rebroadcast said received network programming or broadcast locally produced commercials/programs in place of said received network programming. The programming that was broadcast from the ones of the affiliate stations were received by a plurality of

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television receivers located at the households within the local region served by the affiliates, and/or were received and processed by additional ones of said affiliate stations.

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C) In order to 1) reduce the operating costs of said television and radio broadcast networks, 2) eliminate man made errors in said television and radio networks; and 3) increase the efficiency in flow of programming in said television and radio networks (i.e. the "motion functions"), it became a desirable trend in the television/radio broadcast industries to have "automated" as much of the broadcast network process as was economically beneficial; e.g. where the term "automated" referred to the unmanned operation of network processes by machines instead of station personal (note lines 7-22 on page 5 of the <u>Yamane et al</u> translation). Early on, the process that was targeted for automation involved: the monitoring of broadcast programming for the purpose of determining faults/failures in the network; the monitoring of broadcasted programming for the purpose of determining subsequent program switching opportunities; the control of program flow and switching according to "confirmed program schedules"; etc, ... (note lines 9-18 on page 6 of Yamane et al translation).

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D) One notoriously well known way of automating many of the processes performed by television/radio networks, was through the use of embedded "identification information signals" and "control information signals" within the broadcast network programming such that said embedded signals were used to monitor and identify the network programming being broadcast and were used to provide control over program switching operations of said affiliate stations (note lines 1-6 on page 2 of the Yamane et al translation; lines 11-27 on page 13 and lines 1-21 on page 14 of the Yamane et al translation; lines 16-23 on page 15 of the Yamane et al translation; the last six lines on page 18 of the Yamane et al translation; figure 1 of Hetrich; liens 1-10 on page 2 of Hetrich; the last 9 lines on page 10 of Hetrich; the abstract on page 77 of Anderson; and the first full paragraph under the heading "Introduction" on page 77 of Anderson). It is noted that at least the publication of Anderson recognized the fact that the versatility of this type of system automation could be greatly expanded if the embedded signals were capable of being addressed to a specific ones, and/or to specific ones, of the affiliate stations (note: the first three lines under the heading "Applications" on page 80 of Anderson; and lines 1-12 under the heading "Conclusion" on page 82 of Anderson).

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Conclusion

-Attached: Appendices A, B, C.

- -Appendix A corresponds to the administrative requirement;
- -Appendix B corresponds to a portion of the above defined 'alleged pending claim support';
- -Appendix C is for the obvious type double patenting rejections.

The alleged pending claim support has been considered in totality. The M.P.E.P. states:

Interviews that are solely for the purpose of "sounding out" the examiner, as by a local attorney acting for an out - of - town attorney, should not be permitted when it is apparent that any agreement that would be reached is conditional upon being satisfactory to the principal attorney.

M.P.E.P. 713.03 Interview for "Sounding Out" Examiner Not Permitted.

Examiner would prefer that M.P.E.P. 713.03 be followed.

- 30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *William Luther* whose telephone number is (703) 308-6609. The examiner can normally be reached on Monday through Friday from 9:30 am to 3:00 pm.
- 31. If attempts to reach the examiner by telephone are unsuccessful, supervisor Andrew Faile can be reached at (703) 305-4380.
- 32. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

William Luther Primary Examiner December 25, 1999 Mille

APPENDIX A

(Examples of Claim Conflicts between Applications)

Comparison of claim 12 from Serial No. 08/469,626 to claim 24 from Serial No. 08/487,980.

Claim 12

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

Claim 24

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

- (1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass-medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to control a sequence of events;
- (2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and
- (3) transmitting said one or more control signals to said

- control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:
- (1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to decode a portion of a multichannel broadcast or cablecast transmission;
- (2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and
- (3) transmitting said one or more control signals to said

transmitter before a specific time.

transmitter before a specific time.

Comparison of claim 24 from Serial No. 08/488,620 to claim 23 from Serial No. 08/477,660.

Claim 24

A method of controlling a computer to communicate a television signal in a television network, said network *having* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming said receiver station to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

Claim 23

A method of controlling a computer to communicate a television signal in a television network, said network comprised of a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming *a processor* to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device;

storing said unit of software on said file storage medium;

executing a technique for communicating a file stored on a disk associated with a computer; and

communicating said television signal in accordance with said technique. selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device and

storing said unit of software on said file storage medium,

thereby to enable said computer to execute a technique for communication a file stored on a disk associated with a computer and

communicate said television signal in accordance with said technique.

Comparison of claim 23 from Serial No. 08/488,032 to claim 58 from Serial No. 08/451,746.

Claim 23

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

- (1) inputting a viewer's or participant's reaction at a subscriber station;
- (2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of subscriber input;
- (3) determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction;
- (4) processing an instruct signal which is effective to coordinate data processing with communication or presentation of television programming at said

Claim 58

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

- (1) inputting a viewer's or participant's reaction at a subscriber station;
- (2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of *said specific* subscriber input;
- (3) determining the presence of said *specific* subscriber input at said subscriber station by processing said viewer's or participant's reaction;
- (4) processing an instruct signal which is effective to receive, generate, or present output to supplement television

subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing. programming at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing. Comparison of claim 47 from Serial No. 08/469,106 to claim 46 from Serial No. 08/487,649.

Claim 47

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

- (1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to implement a scheme for generating a control signal and delivering the instruct signal to a transmitter;
- (2) receiving at said transmitter station one or more

Claim 46

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

- (1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to select a broadcast or cablecast signalling scheme and generate a signal in consequence of said selected broadcast or cablecast signalling scheme and delivering the instruct signal to a transmitter;
 - (2) receiving at said

control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals. transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals. Comparison of claim 11 from Serial No. 08/477,805 to claim 25 from Serial No. 08/449,523.

Claim 11

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices. and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

Claim 25

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter;

- (2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of a specific one or more of said plurality of units of television programming; and
- (3) transmitting said one or more control signals to said transmitter before a specific time.

- its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:
- (1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter, said unit of television programming having an instruct signal which is effective at the one or more receiver stations to implement a television signalling scheme;
- (2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of said unit of television programming; and
- (3) transmitting said one or more control signals to said transmitter before a specific time.

Claim Language	Spec. Reference	Specification Language
receiving said plurality of signals, said at least one of said plurality of signals received from a source external to said receiver station, said plurality of signals including at least two	Column 19 lines 35-41;	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
	and lines 28-29	may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
	with lines 45-48.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205.
transmissions of different kinds;	Column 15 lines 52-54.	If a unit like the microcomputer can receive transmissions from more than one source or of more than one kind—television, radio, or other—it will have sufficient apparatus to monitor every channel and kind of transmission it can receive.
processing said at least a portion of said one of said plurality of signals to provide a first portion of said multimedia	Column 19 lines 45-49	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205.
presentation; and	with respect to column 30-34.	Co-ordinating Multimedia Presentations in Time Figure 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.
outputting said multimedia presentation based on said step of processing, said multimedia presentation comprising	Column 19 line 67 to column 20 line 2;	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.
information based on a first of said at least two transmissions of different kinds and information	see above with column 19 lines 39-41;	It records those prices that relate to the stocks in its stored portfolio.
based on a second of said at least two transmissions of different kinds.	Column 20 lines 1-2	his own stocks' performance overlay the studio generated graphic.
	with column 19 lines 55-	and a studio generated graphic is pictured.

	 	Page 2 01 10
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Claim Language	Spec. Reference	Specification Language
receiving a first signal	Column 18 lines 13-14.	The person turns on television, 202, and tunes to
from a first source;		the proper channel.
processing at least a	Column 18 lines 14-25.	TV signal decoder, 203, detects signals in the
portion of said first signal		programing transmission on the channel which
to enable a multimedia		signals it transfers to monitor or processor, 204.
presentation at said		Monitor or processor, 204, determines that certain
receiver station;		signals are addressed to switch, 212, and transfers
		these signals to switch, 212. These signals
		instruct switch, 212, to turn power on to radio,
		209, and its associated equipment, including a
		conventional digital tuner, 213. Monitor or
		processor, 204, also identifies signals addressed to
		tuner, 213, which it transfers accordingly.
receiving a second signal	Column 18 lines 25-26.	These signals instruct tuner, 213, to tune radio,
from a second source	± s2°	209, to the proper frequency for the simulcast.
external to said receiver	٠٠.	
station based on said step		
of processing; and		
outputting said	Column 18 lines 27-29.	Automatically, by turning TV set, 202, to the
multimedia presentation,		channel with a stereo simulcast, the person has
said multimedia		activated the stereo simulcast.
presentation comprising		
information based on said		
first signal and		
information based on said		
second signal.		

Claim Language	Spec. Reference	Specification Language
receiving, from a remote	Column 18 lines 13-17.	The person turns on television, 202, and tunes to
transmitter station, a		the proper channel. TV signal decoder, 203,
control signal at said		detects signals in the programing transmission on
receiver station;		the channel which signals it transfers to monitor or
		processor, 204.
controlling said receiver	Column 18 lines 17-26.	Monitor or processor, 204, determines that certain
station to output said		signals are addressed to switch, 212, and transfers
multimedia presentation in		these signals to switch, 212. These signals
response to said control		instruct switch, 212, to turn power on to radio,
signal; and		209, and its associated equipment, including a
		conventional digital tuner, 213. Monitor or
		processor, 204, also identifies signals addressed to
;		tuner, 213, which it transfers accordingly. These
1		signals instruct tuner, 213, to tune radio, 209, to
		the proper frequency for the simulcast.
outputting said	Column 18 lines 27-29.	Automatically, by turning TV set, 202, to the
multimedia presentation at		channel with a stereo simulcast, the person has

at least two of a plurality	activated the stereo simulcast.
of output devices at said	
receiver station, said	
multimedia presentation	
comprising information	
based on said plurality of	
signals from at least two	
different sources.	

Claim Language	Spec. Reference	Specification Language
receiving at least two	Column 19 lines 28-29	microcomputer, 205, may instruct switch, 216, to
discrete signals from		turn TV set, 202, on and tuner, 215, to tune
different sources, at least		appropriately to "Wall Street Week."
one of said different		
sources being a remote	and lines 37-41.	It may receive these directly or it may
transmitter station;		automatically query a data service for them in a
		predetermined fashion. It records those prices that
		relate to the stocks in its stored portfolio.
processing a control	Column 19 lines 64-66.	This signal is identified by decoder, 203, and
signal to enable output of		transferred via processor, 204, to microcomputer,
a multimedia presentation		205. This signal instructs microcomputer, 205,
at said receiver station;		to transmit the first overlay to TV set, 202, for
and		as long as it receives the same instruction signal
		from processor, 204.
outputting said	Column 19 line 67-	The viewer then sees a microcomputer generated
multimedia presentation	column 20 line 2;	graphic of his own stocks' performance overlay the
based on said step of		studio generated graphic.
processing, said	:	
multimedia presentation		Co-ordinating Multimedia Presentations in Time
comprising one of	with column 19 lines 30-	Figure 6C can also illustrate how programing
1	34.	delivered at different times to one place can be co-
		ordinated to give a multimedia presentation at one
		time in one place.
		Then the heat cares "And here is what your
a sequential	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."
	Column 19 mics 39-00.	portiono did.
and a simultaneous		The viewer then sees a microcomputer generated
and a simultaneous	Column 19 line 67 to	graphic of his own stocks' performance overlay the
presentation of	column 20 line 2.	studio generated graphic.
information based on	Column 20 mc 2.	Studio generated grapine.
Intollimion observit		Then the host says, "And here is what your
a first signal of said at		portfolio did."
least two discrete signals	Column 19 lines 59-60	, pro-
and information based on	Column 17 miles 67 00	own stocks' performance overlay the studio
		generated graphic.
	and column 20 lines 1-2.	6
a second signal of said at		
least two discrete signals.		
	See above column 19 line	It records those prices that relate to the stocks in
	68 to column 20 line 1,	its stored portfolio.

	 1 4 5 0 1 10
with column 19 lines 39-	
41.	

Claim Language	Spec. Reference	Specification Language
processing a first control signal at said receiver station that programs a processor to process at least one signal;	Column 19 lines 45-53.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command.
receiving, from a remote transmitter station, at least one second control signal;	Column 19 lines 60-64.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205.
responding to said at least one second control signal based on said step of processing; and	Column 19 lines 64 to column 20 line 2;	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.
	with respect to column 19 lines 48-53.	These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command.
outputting said	Column 19 lines 67 to	See above.
multimedia presentation at	column 20 line 2,	
said at least one output device based on said step	with respect to column 19	Co-ordinating Multimedia Presentations in Time
of responding.	line 30.	Co ordinating frintimedia i reseminions in Time

Claim Language	Spec. Reference	Specification Language
receiving a user response based on outputting a first	Column 20 lines 24-28, with respect to lines 20-	The viewer then presses buttons 567 on local input, 225, which signal is conveyed to the
signal at said receiver station;	24.	buffer/comparator, 8 (referring to Fig. 1), of signal processor, 200, to hold and process further in a predetermined fashion.
receiving first data signal from a remote transmitter	Column 20 lines 28-32.	Five minutes later, a signal is identified in the incoming programing on TV set, 202, by decoder,

		Page 5 of 10
station;		203, which is also transferred by processor, 204,
		to buffer/comparator, 8, of signal processor, 200.
		This signal instructs buffer/comparator, 8, that, if
		567 has been received from signal generator,
comparing, based on said	Column 20 lines 24-32.	See above.
user response, said first		
data to second data stored		
at said receiver station;		
receiving a second signal	Column 20 lines 35-36.	to the appropriate channel to receive the recipe in
based on said step of		encoded digital form and instruct control means,
comparing; and		226, to activate printer, 221.
outputting said	Column 20 lines 11-14.	Co-ordinating Print and Video
multimedia presentation at		Figure 6D illustrates one method for co-
said receiver station, said		ordinating the presentation of information through
multimedia presentation		the use of print with video. Figure 6D also
comprising		illustrates possible uses of a decrypter and a local
		input.
information based on said		
first signal		
	Column 20 lines 16-17.	Suppose a viewer watches a television program on
		cooking techniques that is received on TV set,
and information based on		202, via box, 201.
said second signal.		
	Column 20 lines 47-50.	When the transmission of the recipe is received,
		box 222, transfers the transmission to decrypter,
		224, for decryption and thence to printer, 221, for
		printing.

Claim Language	Spec. Reference	Specification Language
at least one receiver for receiving a plurality of signals,	Column 19 lines 35	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.
	and line 48.	These signals instruct microcomputer, 205, to generate several graphic video overlays,
said at least one receiver capable of receiving at least one of said plurality of signals from a remote transmitter station, said	Column 19 lines 20-23	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.
plurality of signals including at least	and lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.
two transmissions of different kinds;	Column 15 lines 52-54.	If a unit like the microcomputer can receive transmissions from more than one source or of more than one kind-television, radio, or other-tile will have sufficient apparatus to monitor every channel and kind of transmission it can receive.

		Page 6 of 10
at least one processor	Column 19 lines 35	Each weekday, microcomputer, 205, receives,
operatively connected to		about 4:30 PM, by means of a digital information
said at least one receiver	-	channel, all closing stock prices applicable that
for processing said at least		day.
one of said plurality of		
signals and providing a	line 48;	These signals instruct microcomputer, 205, to
portion of a multimedia		generate several graphic video overlays,
presentation; and		
	line 60;	This signal instructs microcomputer, 205, to
		transmit the first overlay to TV set, 202,
	and column 20 line 4.	and the microcomputer, 205, ceases
		transmitting its own graphic to TV set, 202, and
		prepares to send the next locally generated graphic
		overlay upon instruction from the originating
		studio.
at least one output device	Column 19 line 28	to turn TV set, 202, on and tuner, 215, to tune
operatively connected to		appropriately to "Wall Street Week."
said at least one receiver		
and said at least one	with line 66;	to transmit the first overlay to TV set, 202, for as
processor for outputting		long as it receives the same instruction signal from
said multimedia	- v.	processor, 204.
presentation, said		
multimedia presentation	lines 28-34.	switch, 216, to turn TV set, 202, on and tuner,
		215, to tune appropriately to "Wall Street Week."
		Co-ordinating Multimedia Presentations in Time
1		Figure 6C can also illustrate how programing
		delivered at different times to one place can be co-
]		ordinated to give a multimedia presentation at one
comprising information		time in one place.
based on a first of said at		
least two transmissions		
and information based on	See above citations.	
a second of said at least		
two transmissions.		

Claim Language	Spec. Reference	Specification Language
receiving at a transmitter	Column 11 lines 51-52	For example, if controller/computer, 73,
station in said network		determines that programing incoming via receiver,
said at least one of said		53, should be transmitted immediately to the field
plurality of signals,		distribution system, 93,
· · ·	with column 10 lines 25-28;	Figure 3 illustrates the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.
wherein a first of said plurality of signals and a second of said plurality of	column 19 lines 35-41,	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that

		Page 7 of 10
signals are		day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
	and lines 28-29;	may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
transmissions of different kinds and	column 15 lines 52-54;	If a unit like the microcomputer can receive transmissions from more than one source or of more than one kind-television, radio, or otherit will have sufficient apparatus to monitor every channel and kind of transmission it can receive. See above citations.
said multimedia presentation comprises information based said first of said plurality of signals and information based on said second of said plurality of signals; and	column 19 line 67 to column 20 line 2.	
transmitting said at least one of said plurality of signals to said receiver station before	Column 11 lines 54-57 with column 19 lines 45-56;	controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer programing transmissions inputted from TV receiver, 53, to the output that leads to modulator, 87.
a specific time; whereby said receiver station is enabled to output said multimedia presentation.	Column 19 lines 67-68.	for as long as it receives the same instruction signal from processor, 204

Claim Language	Spec. Reference	Specification Language
a receiver for receiving	Column 11 line 52;	For example, if controller/computer, 73,
said at least one of said		determines that programing incoming via
plurality of signals,		receiver, 53,
wherein at least two of said plurality of signals	Column 19 lines 35-41 and	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
	lines 28-29.	may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall

Specification	Support
Page	8 of 10

		1 age 0 01 10
being transmissions of different kinds and	- Column 15 lines 52-54.	Street Week." If a unit like the microcomputer can receive transmissions from more than one source or of more than one kind—television, radio, or other—it will have sufficient apparatus to monitor every channel and kind of transmission it can receive.
said multimedia presentation comprises	Column 19 line 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic. See above.
information based on a first of said at least two of said plurality of signals and information based on a second of said at least two of said plurality of signals; and	Column 19 lines 39-41.	·
a transmitter operatively connected to said receiver for transmitting said at least one of said plurality of signals to said receiver station.	Column 11 line 57; column 19 lines 14-15;	to the output that leads to modulator, 87. Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multichannel system.
	and column 19 lines 20- 23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.

Claim Language	Spec. Reference	Specification Language
receiving at a second	Column 19 lines 60-62;	At this point, an instruction signal is generated in
transmitter station in said		the television studio originating the programing
network said at least one		and is transmitted in the programing transmission.
of said plurality of		
signals,		
whomin at loant two of	Carabanatan	
wherein at least two of	See above citations.	
said plurality of signals		
are transmissions of		
different kinds and said		
multimedia presentation		
comprises information		
based on a first of said at		
least two of said plurality		
of signals and information		
based on a second of said		

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at least two of said plurality of signals;		
transmitting said at least one of said plurality of	Column 19 lines 60-63;	See above.
signals to said first transmitter station; and	and column 11 lines 50-57.	For example, if controller/computer, 73, determines that programing incoming via receiver, 53, should be transmitted immediately to the field distribution system, 93, via cable channel modulator, 87, controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer programing transmissions inputted from TV receiver, 53, to the output that leads to modulator, 87.
transmitting said at least one instruction,	Column 19 lines 60-63;	See above.
whereby said network is enabled to output said multimedia presentation.	and column 11 lines 38-39.	By comparing identification signals on the incoming programing with the programing schedule received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what channel or channels the head end facility should transmit the programing.

Claim Language	Spec. Reference	Specification Language
an intermediate transmitter for transmitting said at least one of said plurality of signals to said receiver station,	Column 11 line 54;	cable channel modulator, 87.
wherein at least two of said plurality of signals are	Column 19 lines 35-41 and lines 28-29 with lines 45-48.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
transmissions of different kinds and	See above citations.	
said multimedia presentation comprises information based on a first of said at least two of said plurality of signals and	See above citations.	own stocks' performance overlay the studio

		Page 10 of 10
information based on a	Column 20 lines 1-2;	generated graphic.
second of said at least two of said plurality of signals;	and column 19 lines 55- 56.	"Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured. The host then says, "Here is what the broader NASDAQ index did in the week past,"
a selective transfer device operatively connected to said intermediate transmitter for receiving said at least one of said plurality of signals from	Column 11 line 55;	matrix switch, 75.
a remote transmitter and communicating said at least one of said plurality of signals in response to	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.
a control signal which causes said selective transfer device to at least one of	Column 11 lines 38-44.	By comparing identification signals on the incoming programing with the programing schedule received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what channel or channels the head end facility should transmit the programing.
(1) delay transmission of said at least one of said plurality of signals, and (2) transmit said at least	Column 11 lines 58-60;	Similarly, if controller/computer, 73, determines that incoming programing should be recorded for delayed transmission,
one of said plurality of signals based on a schedule; and,	column 11 lines 50-57.	For example, if controller/computer, 73, determines that programing incoming via receiver, 53, should be transmitted immediately to the field distribution system, 93, via cable channel modulator, 87, controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer programing transmissions inputted from TV receiver, 53, to the output that leads to modulator, 87.
a control signal detector operatively connected to said selective transfer device for communicating said control signal.	Column 11 line 41.	controller/computer, 73.

Page 2

Application/Control Number: 08/487,526

Art Unit: 2731

Patented Claim

'490 Claim 1.

Pending Claim

Exr's Findings of Fact

(2-10)

per indep. cloum

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a] overlay signals to their associated [2a] television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

2. A method of communicating information at a multimedia receiver station, said receiver station including at least one receiver for receiving signals, a computer operatively connected to said at least one receiver for processing and communicating information, and a plurality of output devices, with each output device operatively connected to said at least one receiver or said computer for outputting information to a subscriber, said method comprising the steps of: displaying at one of said output devices a television program that promote a multimedia product or service; inputting a subscriber command, controlling said receiver station to receive at least two instruct signals in response to said subscriber command, wherein each one of said at least two instruct signals at

Examiner rejects the alleged support offered by Applicant for pending claim 2. However, assuming arquendo that claim 2 is supported by the '81 WSW embodiment. It is the same embodiment from which '490 claim l draws it's support. Pending claim 2, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. The following '81 WSW embodiment alleged by Applicants to support pending claim 2 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

east one of specifies and designates: (1) a specific portion of multimedia programming, and (2) a specific function to be performed with said specific portion of multimedia programming detecting the 1 presence of said at least two instruct signals at said receiver station, each of said at least two instruct signals at least one of specifying and designating at least one of: 1) a portion of a multimedia programming signal to receive; (2) a portion of a multimedia programming signal to communicate to a memory location; (3) a digital datum to record or play; (4) a portion of a multimedia programming signal to communicate to a processor; (5) a portion of a television signal to communicate at least one of to a television monitor

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and..... causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a] television receivers in response to said [6q]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a specific

and a television recorder/ player; (6) two portions of a multimedia presentation to communicate from separate locations to an output device, with at least one of said separate locations being a memory or storage location; (7) a multimedia presentation graphic to generate; a a place to present multimedia output; and or analyzing said at least two or more specific portions of multimedia programming in accordance with said designated specific function to be performed with each of said specific portion of multimedia programming, based on said step of controlling; and outputting organized at least two or more specific portions of multimedia programing as a part of a single multimedia programming presentation to at least one of said output devices at

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

Application/Control Number: 08/487,526

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

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user.	said receiver	for programing of
	station based on	interest to play or
	said step of	record.
	organizing.	
		In another
		example,
		microcomputer, 205
		may be preinformed
		that a certain
		1
		television program,
		hypothetically "Wall
		Street Week," should
	•	be televised on
	25"	TV set, 202, when it
	· ·	is cablecast.
		Microcomputer, 205,
		is preinformed of
	'	the
		time of
		cablecasting. When
		that time comes,
		1
		microcomputer, 205,
		receives no
		program
		identification
		signals whatever
		from TV signal
		decoder, 203, which
		indicates that the
		set, 202, is not on.
		Microcomputer, 205,
		instructs signal
		processor, 200, to
		pass all program and
		channel identifiers
		1
		on all programing
		being cablecast on
		the multi-channel
		system. Signal
;		processor, 200,
ţ		receives
		this instruction
		from microcomputer,
		205, at its
	<u> </u>	1

Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing
		also externally to microcomputer, 205, all signals that it passes to buffer/comparator,
		14. Analyzing these identifier signals in a predetermined fashion,
		microcomputer, 205, determines that "Wall Street Week" is being televised
		on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner,
		214, to switch box, 201, to channel X and may instruct control
		system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer,
		205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune
		appropriately to "Wall Street Week." Co-ordinating Multimedia
		Presentations in Time

Application/Control Number: 08/487,526

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
÷		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

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Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall Street Week"
		transmission begins
		at 8:30 PM on a
<u> </u>		Friday evening,
		several instruction
1		signals are
		identified by
		decoder, 203, and
	1	transferred to
		microcomputer, 205.
		These signals
	1	instruct
		microcomputer, 205,
		to generate
		several graphic
		video overlays,
		which microcomputer,
		205, has the means
		to
		generate and
		transmit and TV set,
		202, has the means
		to receive and display,
		and to transmit
		these overlays to TV
		set, 202, upon
		command.
		Subsequently in
		the program, the
	,	host says, "Here is
		what the Dow Jones
		Industrials did is
		the
		past week," and a
		studio generated
		graphic is pictured.
		The host then says,
		"Here is what the
		broader NASDAQ index
		did in the week
		past," and a studio

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Application/Control Number: 08/487,526

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphics
		are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a] overlay signals to their associated [2a] television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signal's transmitted to their associated [2a] receivers,

- 9.A method of communicating subscriber station information from a subscriber station to at least one remote station collection station, said method comprising the steps of
- (1) inputting a subscriber reaction at a subscriber station determining the presence of a specific subscriber input at said subscriber station by processing said subscriber reaction;
- (3) receiving at said subscriber station in accordance with said specific subscriber input, n instruct signal for processing and at least two specific portions of multimedia programming for outputting;
- (4) processing said instruct signal which organizes said at least two specific portions of multimedia programming, and outputs said at

Examiner rejects the alleged support offered by Applicant for pending claim 9. However, assuming arquendo that claim 9 is supported by the '81 WSW embodiment. It is the same embodiment from which '490 claim 1 draws it's support. Pending claim 9, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of `490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 9 is the same support for '490' claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6q] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality. of [2] receiver stations, detecting the presence of said [6q] instructto-overlay signal at said [2] selected

least two specific portions of multimedia programming as a part of a single multimedia programming presentation based on aid step of determining; and

(5) transferring from said subscriber station to said at least one remote data collection station at least one datum which, based on said step of processing, evidences one of processing said instruct signal and outputting said multimedia programming presentation.

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

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Patented Claim Pending Claim

Exr's Findings of Fact

I WORK OF THE	r charing commit	THE OF SHARINGS AS I WAS
receiver stations		all incoming
and coupling		signals. Signal
[6g] said instruct-		processor, 200,
to-overlay signal to		scans sequentially
the [2b] computer		all channels.
associated with the		When it identifies a
[2a] video receivers		signal of interest,
of said selected		it relays that
stations,		information and the
สแน่	-	channel identifier,
causing said last		in this
named		illustration, to
[2b] computers to		microcomputer, 205.
generate and	* <u>\$</u>	In a
transmit their		predetermined
[6a] overlay signals		fashion, either
to their associated		microcomputer, 205,
[2a]television		or signal processor,
receivers in		200,
response		instructs tuner,
to said		223, to set cable
[6g]instruct-to-		converter box, 222,
overlay signal,		to the proper
thereby		channel,
to present a		and microcomputer,
[6'] display at the		200, may record the information in
selected		memory or transfer
[2] receiver		it to
stations including		printer, 221, for
[6] the television		printer, 221, 101 printing.
program material and		Princing.
[6a] the related		In the same
computer generated		fashion,
overlay, the		microcomputer, 205,
overlays displayed		may also instruct
at a multiplicity of		signal processor,
[2a] said receiver		200, to monitor
stations being		single or multiple
different,		television channels
[6a from 6b and 6c]		and/or radio
with each display		channels
specific to a		
specific		

user. for programing of interest to play record. In another example, microcomputer, 20 may be preinforme that a certain television programing of interest to play record.	
example, microcomputer, 20 may be preinforme that a certain	
hypothetically "W Street Week," sho be televised on TV set, 202, when is cablecast. Microcomputer, 20 is preinformed of the time of cablecasting. Wh that time comes, microcomputer, 20 receives no program identification signals whatever from TV signal decoder, 203, whi indicates that th set, 202, is not Microcomputer, 20 instructs signal processor, 200, t pass all programing being cablecast o the multi-channel system. Signal processor, 200, receives this instruction from microcompute 205, at its	m, all uld it 5, en 5, o and rs n

Application/Control Number: 08/487,526

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and
		tuner, 215, to tune appropriately to "Wall Street Week."
\		Co-ordinating Multimedia Presentations in Time

Application/Control Number: 08/487,526

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command. Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated
; \		graphic is pictured. The host then says, "Here is what the broader NASDAQ index did in the week past," and a studio

	generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same
	it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer
	generated graphic of his own stocks' performance overlay the studio generated graphic. When the two studio generated graphics are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
*		·

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a] overlay signals to their associated [2a]television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

- 13. A method of controlling a remote transmitter station to communicate program material to a remote receiver station and controlling said remote receiver station to process a receiver specific response, said method comprising the steps of:
- (1) receiving mass medium programming to be transmitted by the remote intermediate ass medium transmitter station and delivering said mass medium programming a transmitter;
- (2) receiving at least one instruct signal at said remote intermediate mass medium transmitter stat n, said at least one instruct signal operative at the remote receiver station to originate least two specific portions of said multimedia programming and to output said at least two specific portions of said multimedia programming as a pa

Examiner rejects the alleged support offered by Applicant for pending claim However, assuming arguendo that claim 13 is supported by the '81 WSW embodiment. Ϊt is the same embodiment from which '490 claim 1 draws it's support. Pending claim 13, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of `490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 13 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d] specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

of a single
multimedia
programming
presentation at said
receiver station.,
base on a subscriber
reaction to
information
contained in said
mass medium
programming, and
communicating said
at least one
instruct signal to
said transmit r;

- (3) receiving at least one control signal said remote transmitter station wherein said at least one control signal contr s the communication of said mass medium programming and said at least one instruct signal between said remote transmitter station and said remote receiver station;
- (4) transmitting from said remote transmitter statio at least one information transmission containing said mass medium programing and said at least one instruct signal.

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and..... causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6g]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a

specific

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier. in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

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D - 4 4	101.
Patente	d Claim

Pending Claim

Exr's Findings of Fact

user.		I for any and
user.		for programing of
		interest to play or
		record.
		To an at the con-
		In another
		example,
		microcomputer, 205
		may be preinformed
		that a certain
		television program,
	1	hypothetically "Wall
İ		Street Week," should
		be televised on
	÷ 3.	TV set, 202, when it
		is cablecast.
		Microcomputer, 205,
		is preinformed of
		the
]		time of
		cablecasting. When
	<u> </u>	that time comes,
† ·		microcomputer, 205,
		receives no
		program
	1	identification
		signals whatever
		from TV signal
		decoder, 203, which
		indicates that the
		set, 202, is not on.
		Microcomputer, 205,
		instructs signal
		processor, 200, to
		pass all program and
		channel identifiers
		on all programing
		being cablecast on
		the multi-channel
		system. Signal
; j		processor, 200,
\		receives
		this instruction
		from microcomputer,
		205, at its

Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune
		appropriately to "Wall Street Week." Co-ordinating
		Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
	÷ v.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
į		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall
		Street Week"
	1	transmission begins
		at 8:30 PM on a
	İ	Friday evening,
		several instruction
]	signals are
	1	identified by
		decoder, 203, and
		transferred to
		microcomputer, 205.
		These signals
		instruct
		microcomputer, 205,
		to generate
		several graphic
		video overlays,
		which microcomputer,
· · · · · · · · · · · · · · · · · · ·		205, has the means
		to
		generate and
		transmit and TV set,
		202, has the means
		to receive and
		display,
		and to transmit
		these overlays to TV
		set, 202, upon
		command.
		Subsequently in
		the program, the
		host says, "Here is
		what the Dow Jones
		Industrials did is
		the
		past week," and a
		studio generated
		graphic is pictured.
		The host then says,
		"Here is what the
		broader NASDAQ index
		did in the week
		past," and a studio

Patented Claim	Pending Claim	Exr's Findings of Fact
		generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and
	* <u>v</u>	is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs
		microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer
÷ • • • • • • • • • • • • • • • • • • •		generated graphic of his own stocks' performance overlay the studio generated graphic. When the two studio generated graphics are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
-		

Patented Claim

stations

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of
[2] receiver

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a] overlay signals to their associated [2a]television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated

[2a] receivers,

Claim 18. A method o controlling a remote intermediate transmitter station to communicate at least one instruct signal to at least one receiver station, said remote intermediate transmitter station including one of a broadcast and cablecast transmitter, a plurality o elective transfer devices each operatively connected to said one of said broadcast d said cablecast transmitter, a receiver for receiving said at least one instruct signal from at least one origination transmitter station, a control signal detect and one of a controller and computer capable of controlling at least one of id plurality of selective transfer devices, and with said remote intermediate transmitter station adapted to detect the presence of at least one control signal, to contr the communication of said at least one

Examiner rejects the alleged support offered by Applicant for pending claim However. assuming arguendo that claim 18 is supported by the '81 WSW embodiment. is the same embodiment from which '490 claim 1 draws it's support. Pending claim 18, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 18 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

instruct signal in response to said at least one control signal, and to deliver at said one of said broadcast and said cablecast transmitter said at least one instruct signal, said method comprising the steps

originating said at least one instruct signal at said at least one origination transmitter station and delivering said at least one instruct signal to at least one o origination transmitter, said at least one instruct signal being effective at said at least one receiver station to organize at least two specific portions of multi dia programming and to output said at least two specific portions of multimedia programming as a part of a single multimedia programming presentation at said receiver station, based on a subscriber input;

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6g]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a specific

(2) receiving said at least one control signal which at the remote intermediate transmitter stat n is operative to control the communication of said instruct signal; and

(3) transmitting said at least one control signal to said at least one origination transmitter before a sped *c time.

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

Patented Claim

Pending Claim

Exr's Findings of Fact

user.	for programing of
	interest to play or
	record.
	In another
1	example,
	microcomputer, 205
	may be preinformed
	that a certain
	television program,
	hypothetically "Wall
	Street Week," should
	be televised on
	TV set, 202, when it
	is cablecast.
	Microcomputer, 205,
	is preinformed of
	the
	time of
	cablecasting. When
	that time comes,
	microcomputer, 205,
	receives no
	program
	identification
	signals whatever
	from TV signal
	1
	decoder, 203, which
	indicates that the
	set, 202, is not on.
	Microcomputer, 205,
	instructs signal
	processor, 200, to
	pass all program and
	channel identifiers
	on all programing
	being cablecast on
	the multi-channel
	system. Signal
	processor, 200,
	receives
	this instruction
	from microcomputer,
	205, at its
L	200, at 165

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Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
÷ \		Co-ordinating Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Street transm	he "Wall
Friday severa signal identi decode transf microc These instrumicroc to gen severa video which 205, h to genera transm 202, h to rec displa and to these set, 2 comman Subseq the prhost s what t Indust the past w studio graphi The ho "Here broade did in	week" ission begins PM on a vevening, il instruction s are fied by r, 203, and ferred to computer, 205. signals act computer, 205, arate il graphic overlays, microcomputer, as the means te and at and TV set, as the means te ive and y, transmit overlays to TV 102, upon

Patented Claim	Pending Claim	Exr's Findings of Fact
		generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an
		instruction signal is generated in the television studio originating the programing and is
	·	transmitted in the programing transmission. This signal is identified by decoder, 203, and
		transferred via processor, 204, to microcomputer, 205. This signal instructs
		microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same
		instruction signal from processor, 204. The viewer then sees a microcomputer
		generated graphic of his own stocks' performance overlay the studio generated graphic. When the
		two studio generated graphics are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
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Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television

[6] program material
to a multiplicity of
[2] receiver
stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a] overlay signals to their associated [2a] television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

Claim 21. A method of delivering one of a coordinated media presentation and a multichannel programming presentation at a receiver station, said receiver station including a plurality of receivers, a tuner, a processor, and a plurality of output devices, a first of said plurality of receivers having a signal output coupled as an input to said processor, said processor having an output operatively connected to a control input of said tuner, said tuner being operatively connected at least one of to said plurality of receivers so as to control reception of signals by said at least one of said plurality of receivers, and each of said plurality of output devices being operatively connected to said plurality of

receivers for

outputting received

Examiner rejects the alleged support offered by Applicant for pending claim However. assuming arquendo that claim 21 is supported by the '81 WSW embodiment. is the same embodiment from which '490 claim 1 draws it's support. Pending claim 21, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of `490 claim 1. The following '81 WSW embodiment alleged by Applicants to support pending claim 21 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the ; presence of said [6g] instructto-overlay signal at said [2] selected

information, said method comprising the steps of: receiving at said first of said plurality of receivers a first signal, said first signal including a first mass medium program and at least one embedded control signal; transferring said first mass medium program to a first of said plurality of output devices for outputting to a subscriber; detecting said at least one embedded control signal and inputting said at least one embedded control signal to said processor; transferring, under control of said processor, at least one embedded control signal to said tuner so that said tuner causes said plurality of receivers to receive a second signal, said second signal including a second mass medium program; combining at least a portion of said first mass medium program and said

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

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Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6q]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a

specific

second mass medium program at said plurality of output devices; and

outputting at said receiver station a coordinated presentation of said first mass medium program and said second mass medium program.

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

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Patented Claim Pending Claim

Exr's Findings of Fact

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user.		for programing of interest to play or record.
	,	In another example, microcomputer, 205 may be preinformed that a certain television program, hypothetically "Wall
	- gr	Street Week, "should be televised on TV set, 202, when it is cablecast.
		Microcomputer, 205, is preinformed of the time of
		cablecasting. When that time comes, microcomputer, 205, receives no
		program identification signals whatever from TV signal
		decoder, 203, which indicates that the set, 202, is not on. Microcomputer, 205,
		instructs signal processor, 200, to pass all program and channel identifiers
		on all programing being cablecast on the multi-channel
\		system. Signal processor, 200, receives this instruction
		from microcomputer, 205, at its

Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and
		tuner, 215, to tune appropriately to "Wall Street Week."
		Co-ordinating Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
	- v.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
; 1		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command. Subsequently in the program, the
		the program, the host says, "Here is what the Dow Jones Industrials did is the
		past week," and a studio generated graphic is pictured. The host then says, "Here is what the broader NASDAQ index did in the week
		past," and a studio

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
	·	

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Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a]overlay signals to their associated [2a]television receivers, [6a] said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

Claim 42. The method of providing a coordinated media presentation signal at a receiver station, said receiver station having a receiver section, a processing section, and an output generation section, operatively coupled together and controlled by a control section, said method comprising the steps of: receiving a multichannel signal at an input to said receiver section; selecting a first television program from said multichannel signal; generating a television output from said first selected television program at said output generation section; detecting at least one embedded control signal in said first television program; decoding, from said at least one embedded control signal, instructions directed to said processing section;,

Examiner rejects the alleged support offered by Applicant for pending claim However, assuming arguendo that claim 42 is supported by the '81 WSW embodiment. is the same embodiment from which '490 claim 1 draws it's support. Pending claim 42, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 42 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

predetermined

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

selecting a second television program from said multichannel signal based on said instructions from said step of decoding; combining at least a portion of said first television program with at least a portion of said second television program; generating a television output from said step of combining.

fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

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Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations		all incoming
and coupling		signals. Signal
[6g] said instruct-		processor, 200,
to-overlay signal to		scans sequentially
the [2b] computer		all channels.
associated with the		When it identifies a
[2a] video receivers		signal of interest,
of said selected	•	it relays that
stations,		information and the
and		channel identifier,
causing said last		in this
named		illustration, to
[2b] computers to	± 35°	microcomputer, 205.
generate and	• •	In a
transmit their		predetermined
[6a] overlay signals		fashion, either
to their associated		microcomputer, 205,
[2a]television		or signal processor, 200,
receivers in		instructs tuner,
response		223, to set cable
to said		converter box, 222,
[6g]instruct-to-		to the proper
overlay signal,		channel,
thereby		and microcomputer,
to present a		200, may record the
[6'] display at the		information in
selected		memory or transfer
[2] receiver		it to
stations including		printer, 221, for
[6] the television		printing.
program material and		
[6a] the related		In the same
computer generated		fashion,
overlay, the		microcomputer, 205,
overlays displayed		may also instruct
at a multiplicity of		signal processor,
[2a] said receiver		200, to monitor
stations being		single or multiple
different,		television channels
[6a from 6b and 6c]		and/or radio
with each display		channels
specific to a		
specific		

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

licor	I for programing of
user.	for programing of
	interest to play or
	record.
	In another
	example,
	microcomputer, 205
	may be preinformed
	that a certain
	television program,
	hypothetically "Wall
	Street Week, " should
1	be televised on
	TV set, 202, when it
	is cablecast.
	Microcomputer, 205,
	is preinformed of
	the
	time of
	cablecasting. When
	that time comes,
	microcomputer, 205,
	receives no
	program
	identification
	signals whatever
	from TV signal
	decoder, 203, which
	indicates that the
	set, 202, is not on.
	Microcomputer, 205,
	instructs signal
	processor, 200, to
1	pass all program and
	channel identifiers
	on all programing
	being cablecast on
	the multi-channel
	system. Signal
	processor, 200,
	receives
	this instruction
	from microcomputer,
	205, at its

Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week." Co-ordinating Multimedia
		Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays,
		which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command. Subsequently in
		the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured. The host then says, "Here is what the broader NASDAQ index did in the week past," and a studio

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Patented Claim	Pending Claim	Exr's Findings of Fact
		generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphics
	<u> </u>	are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
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Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a]overlay signals to their associated [2a]television receivers, [6a]said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

Claim 45. A method of delivering a coordinated multiple media programming presentation at a receiver station, said receiver station including a first receiver, a second receiver, a tuner, a processor, and at least one output device wherein said first receiver has a signal output coupled as an input to the processor, said processor has an output operatively connected to a control input of said tuner, said tuner is operatively connected to said second receiver so as to control the reception of signals by said second receiver, and each of said at least one output device is operatively connected to a presentation device for the presentation of a least one of video, audio, and printed text, said method comprising the steps of:

Examiner rejects the alleged support offered by Applicant for pending claim 45. However, assuming arguendo that claim 45 is supported by the '81 WSW embodiment. is the same embodiment from which '490 claim 1 draws it's support. Pending claim 45, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 45 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6q] instructto-overlay signal at said [2] selected

receiving, at said first receiver, a first mass medium signal, said first mass medium signal being of a signal type and comprising at least one embedded datum: determining said signal type of said first mass medium signal at said first receiver based on stored information; inputting at least a portion of said first mass medium signal to one of said processor and a first output device of said at least one output device based said step of determining; outputting, based on said first mass medium signal, first mass medium programming at said first output device; detecting a presence of at least one control signal type at said first receiver: inputting said at least one control signal type to said processor; said processor communicating to

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

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Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6g]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a specific

said tuner, a first control signal that controls said tuner to cause said second receiver to receive a desired second signal, said first control signal being of said at least one control signal type;

receiving, at said second receiver, said desired second signal, said desired second signal comprising second mass medium programming; transferring said second mass medium programming to said at least one output device; and outputting, at said at least one output device, said second mass medium programming in coordination with said first mass medium programming.

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

user.		for programing of
		interest to play or
		record.
		In another
		example,
		microcomputer, 205
		may be preinformed
		that a certain
		television program,
		hypothetically "Wall
		Street Week, " should
	. •	be televised on
	÷ sr	TV set, 202, when it
		is cablecast.
		Microcomputer, 205,
		is preinformed of
		the
		time of
		cablecasting. When
		that time comes,
,		microcomputer, 205,
		receives no
		program
		identification
		signals whatever
		from TV signal
		decoder, 203, which
·		indicates that the
		set, 202, is not on.
		Microcomputer, 205,
		instructs signal
		processor, 200, to
		pass all program and
		channel identifiers
		on all programing
		being cablecast on
		the multi-channel
		system. Signal
÷		processor, 200,
† ·		receives
		this instruction
		from microcomputer,
		205, at its

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Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week." Co-ordinating
		Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
; •		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall
		Street Week"
		transmission begins
		at 8:30 PM on a
ł		Friday evening,
		several instruction
		signals are
		identified by
		decoder, 203, and
		transferred to
		microcomputer, 205.
		These signals
		instruct
		microcomputer, 205,
		to generate
		several graphic
		video overlays,
		which microcomputer,
		205, has the means
		to
		generate and
		transmit and TV set,
		202, has the means
		to receive and
		display,
		and to transmit
		these overlays to TV
		set, 202, upon
		command.
		Subsequently in
		the program, the
·		host says, "Here is what the Dow Jones
		Industrials did is
		the
		past week," and a
		studio generated
		graphic is pictured.
		The host then says,
		"Here is what the
		broader NASDAQ index
		did in the week
		past," and a studio
<u> </u>		, pass, and a season

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of
; \		

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.

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Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television [6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a]overlay signals to their associated [2a] television receivers, [6a]said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a] the overlay signals transmitted to their associated [2a] receivers,

Claim 55. (New Claim) A method of gathering information on the use, at a receiver station, of one of (a) a resource that delivers at least a portion of a multiple media programming presentation and (b) a control signal that is processed to control delivery of at least a portion of a multiple media programming presentation, said receiver station having a processor, and a controlled device, said receiver station transferring said gathered information to a remote station, said method comprising the steps of:

- (1) identifying said
 one of said resource
 and said control
 signal;
- (2)monitoring said
 use of said one of
 said resource and
 said control signal;
- (3) storing a record of said use of said one of said resource and said control signal based on said

Examiner rejects the alleged support offered by Applicant for pending claim 55. However, assuming arguendo that claim 55 is supported by the '81 WSW embodiment. Ιt is the same embodiment from which '490 claim 1 draws it's support. Pending claim 55, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 55 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

predetermined

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

step of monitoring;
and

(4) communicating, from said receiver station to said remote station, information evidencing said use of said one of said resource and said control signal based on said step of storing.

fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

Tatemed Claim	I thomg Claim	Dai brindings of fact
receiver stations		all incoming
and coupling		signals. Signal
[6g] said instruct-		processor, 200,
to-overlay signal to		scans sequentially
the [2b] computer		all channels.
associated with the		When it identifies a
[2a] video receivers		signal of interest,
of said selected	•	it relays that
stations,		information and the
and		channel identifier,
causing said last		in this
named		illustration, to
[2b] computers to	A street	microcomputer, 205.
generate and	• •	In a
transmit their	·	predetermined fashion, either
[6a] overlay signals		microcomputer, 205,
to their associated		or signal processor,
[2a]television		200,
receivers in		instructs tuner,
response		223, to set cable
to said		converter box, 222,
[6g]instruct-to-		to the proper
overlay signal,		channel,
thereby		and microcomputer,
to present a		200, may record the
[6'] display at the		information in
selected		memory or transfer
[2] receiver		it to
stations including		printer, 221, for
[6] the television		printing.
program material and		To the same
[6a] the related computer generated		In the same fashion,
overlay, the		microcomputer, 205,
overlay, the overlays displayed		may also instruct
at a multiplicity of		signal processor,
[2a] said receiver		200, to monitor
stations being		single or multiple
different,		television channels
[6a from 6b and 6c]		and/or radio
with each display		channels
specific to a		
specific		

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

user.	for programing o	f
İ	interest to play	or
	record.	
	In another	
	example,	
	microcomputer, 2	05
	may be preinform	.ed
	that a certain	
	television progr	am,
	hypothetically "	Wall
	Street Week, " sh	ould
	be televised on	
	TV set, 202, whe	n it
	is cablecast.	
	Microcomputer, 2	05,
	is preinformed o	
	the	
	time of	
	cablecasting. W	hen
	that time comes,	
	microcomputer, 2	05,
	receives no	
	program	
İ	identification	
	signals whatever	
	from TV signal	
	decoder, 203, wh	ich
	indicates that the	he
	set, 202, is not	on.
	Microcomputer, 2	05,
	instructs signal	
	processor, 200,	to
	pass all program	
	channel identific	ers
	on all programin	g
	being cablecast	
	the multi-channe.	1
	system. Signal	
	processor, 200,	
	receives	
	this instruction	
	from microcompute	er,
	205, at its	

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Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
į		Co-ordinating Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

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Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall Street Week" transmission begins
		at 8:30 PM on a
		Friday evening,
		several instruction
		signals are
		identified by
		decoder, 203, and transferred to
		microcomputer, 205.
		These signals
	÷ 257	instruct
	- x-	microcomputer, 205,
		to generate
		several graphic
		video overlays, which microcomputer,
		205, has the means
		to
		generate and
'		transmit and TV set,
		202, has the means
		to receive and
		display, and to transmit
		these overlays to TV
		set, 202, upon
		command.
		Subsequently in
		the program, the
		host says, "Here is
		what the Dow Jones Industrials did is
		the
		past week," and a
		studio generated
}		graphic is pictured.
		The host then says,
		"Here is what the
· ·		broader NASDAQ index
		past," and a studio
		past, and a studio

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Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a
		performance overlay the studio generated graphic. When the two studio generated graphics
		are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.
÷		

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Patented Claim

Pending Claim

Exr's Findings of Fact

1490 Claim 1.

A method of communicating television [6] program materi

[6] program material
to a multiplicity of
[2] receiver
stations

each of which includes
[2a] a television receiver and
[2b] computer,
[2b] the computers being adapted to generate and transmit
[6a] overlay signals to their associated
[2a] television receivers,
[6a] said overlay

signals causing
[6'] the display of
[6b] user specific
information related
to [6] said program
material,
and with at least
some of said
[2b] computers being
programmed to [11]
process [6c] overlay
modification control
signals so as to
modify [6a] the

overlay signals

[2a] receivers,

associated

transmitted to their

Claim 57. (New Claim) A method of controlling a remote intermediate mass medium program transmitter station to communicate mass medium program material to a remote receiver station and controlling said remote receiver station to deliver an individualized mass medium program presentation, said method comprising the steps of:

- (1) receiving, at said remote intermediate mass medium program transmitter station, mass medium programming to be transmitted by the remote intermediate mass medium program transmitter station;
- (2) delivering said mass medium programming to a transmitter;
- (3) receiving at least one instruct signal at said remote intermediate mass medium program transmitter station, said at least one instruct signal instructs said remote receiver

Examiner rejects the alleged support offered by Applicant for pending claim 57. However, assuming arguendo that claim 57 is supported by the '81 WSW embodiment. is the same embodiment from which '490 claim 1 draws it's support. Pending claim 57, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of `490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 57 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

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Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d] specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations and [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the ; presence of said [6q] instructto-overlay signal at said [2] selected

station to process at least one of a plurality of

signal types and to deliver at least a portion of a multiple media programming presentation;

- (4) communicating said at least one instruct signal to said transmitter;
- (5) receiving at least one control signal at said remote intermediate mass medium program transmitter station, said at least one control signal controls said remote intermediate mass medium program transmitter station to communicate one of said mass medium programming and said at least one instruct signal;
- (6) transmitting, in accordance with said at least one control signal, from said remote intermediate mass medium program transmitter station, an information transmission comprising said mass medium programming

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

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Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, and causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6q]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a

specific

and said at least one instruct signal

- (7) receiving, at said remote receiver station, said information transmission;
- (8) processing said one of said plurality of signal types according to said at least one instruct signal; and
- (9) delivering, at said remote receiver station, said at least a portion of one of said multimedia programming presentation and said multiple media programming presentation according to said at least one instruct signal.

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

user.	for programing of interest to play or record.
	In another example, microcomputer, 205 may be preinformed that a certain television program, hypothetically "Wall Street Week," should be televised on TV set, 202, when it is cablecast. Microcomputer, 205, is preinformed of the
·	time of cablecasting. When that time comes, microcomputer, 205, receives no program identification signals whatever from TV signal
	decoder, 203, which indicates that the set, 202, is not on. Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing
į	being cablecast on the multi-channel system. Signal processor, 200, receives this instruction from microcomputer, 205, at its

Patented Claim	Pending Claim	Exr's Findings of Fact
Patented Claim	Pending Claim	processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn witch, 216, to turn
		TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
		Co-ordinating Multimedia Presentations in Time

Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
; \		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall Street Week"
		transmission begins at 8:30 PM on a
		Friday evening,
	1	several instruction
		signals are
		identified by
		decoder, 203, and transferred to
		microcomputer, 205.
		These signals
		instruct
		microcomputer, 205,
	· ·	to generate several graphic
		video overlays,
		which microcomputer,
		205, has the means
		to
		generate and transmit and TV set,
		202, has the means
		to receive and
		display,
		and to transmit
		these overlays to TV set, 202, upon
·		command.
		Subsequently in
		the program, the
		host says, "Here is
		what the Dow Jones Industrials did is
		the
		past week," and a
		studio generated
		graphic is pictured.
		The host then says, "Here is what the
		broader NASDAQ index
		did in the week
		past," and a studio

generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic. When the two studio generated graphics are no longer	Patented Claim	Pending Claim	Exr's Findings of Fact
			generated graphic overlay is displayed on top of the first graphic. Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphics

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	displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

'490 Claim 1.

A method of communicating television
[6] program material to a multiplicity of [2] receiver stations

each of which includes [2a] a television receiver and [2b] computer, [2b] the computers being adapted to generate and transmit [6a]overlay signals to their associated [2a]television receivers, [6a]said overlay signals causing [6'] the display of [6b] user specific information related to [6] said program material, and with at least some of said [2b] computers being programmed to [11] process [6c] overlay modification control signals so as to modify [6a]the overlay signals transmitted to their associated [2a] receivers,

Claim 63. (New Claim) A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium programming to at least one receiver station, said remote intermediate mass medium programming transmitter station including one of a broadcast transmitter and a cablecast transmitter for transmitting said mass medium programming, a plurality of selective transfer devices each operatively connected to said one of said broadcast transmitter and said cablecast transmitter for communicating said mass medium programming, a mass medium programming receiver for receiving said mass medium programming from at least one origination transmitter station, a control signal detector, and one of a controller and a computer capable of

Examiner rejects the alleged support offered by Applicant for pending claim However, assuming arguendo that claim 63 is supported by the '81 WSW embodiment. It is the same embodiment from which '490 claim 1 draws it's support. Pending claim 63, if supported by the '81 WSW embodiment per Applicants allegations are then found to be an obvious variation of '490 claim 1. following '81 WSW embodiment alleged by Applicants to support pending claim 63 is the same support for '490 claim 1. The embodiment spans '490 col 18 line 43 thru col 20 line 10. Receiving Selected Information and/or Programing

FIG. 6C illustrates methods for monitoring multiple programing channels and selecting programing and information in a

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

each of said [2b] computers being programmed to accommodate a [6d]specific user application, comprising the steps of: transmitting a [6e] video signal containing a [6f] television program signal to said [2a] receivers, transmitting an [6g] instruct-to-overlay signal to [2] said receiver stations at a time when the corresponding [6][6'][6a][6b] [6c] [6d] [6e] [6f] overlay is not being displayed, receiving said [6e] video signal at a plurality of [2] receiver stations [6'] displaying said [6] program material on the [2a] video receivers of selected ones of said plurality of [2] receiver stations, detecting the presence of said [6g] instructto-overlay signal at said [2] selected

controlling at least one of said plurality of selective transfer devices, said remote intermediate mass medium programming transmitter station adapted to detect the presence of at least one control signal, to control the communication of said mass medium programming in response to said at least one control signal, and to deliver at said one of said broadcast

transmitter and said cablecast transmitter said mass medium programming, said method comprising the steps of:

- (1) receiving said mass medium programming at said at least one origination transmitter station;
- (2)delivering said mass medium programming to at least one origination transmitter, said mass medium programming having an instruct signal that instructs said

predetermined fashion. In this example, microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in. Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services proceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries. In a predetermined fashion, microcomputer, 205, instructs signal processor, 200, to hold examples of the sought for unique signals in its buffer/comparator, 8, and compare them with

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

receiver stations and coupling [6g] said instructto-overlay signal to the [2b] computer associated with the [2a] video receivers of said selected stations, causing said last named [2b] computers to generate and transmit their [6a] overlay signals to their associated [2a]television receivers in response to said [6g]instruct-tooverlay signal, thereby to present a [6'] display at the selected [2] receiver stations including [6] the television program material and [6a] the related computer generated overlay, the overlays displayed at a multiplicity of [2a] said receiver stations being different, [6a from 6b and 6c] with each display specific to a specific

at least one receiver station to process one of a plurality of signal types and to deliver at least a portion of a multiple media programming presentation;

- (3) receiving said at least one control signal, said at least one control signal controls, at the remote intermediate mass medium programming transmitter station, the communication of said mass medium programming; and
- (4) transmitting said at least one control signal to said one of a broadcast transmitter and said cablecast transmitter before a specific time.

all incoming signals. Signal processor, 200, scans sequentially all channels. When it identifies a signal of interest, it relays that information and the channel identifier, in this illustration, to microcomputer, 205. predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel, and microcomputer, 200, may record the information in memory or transfer it to printer, 221, for printing.

In the same fashion, microcomputer, 205, may also instruct signal processor, 200, to monitor single or multiple television channels and/or radio channels

Art Unit: 2731

Patented Claim

Pending Claim

Exr's Findings of Fact

user.	for programing of
	interest to play or
	record.
	In another
	example,
1	microcomputer, 205
	may be preinformed
<u> </u>	that a certain
	television program,
	hypothetically "Wall
	Street Week, should
	be televised on
j	TV set, 202, when it
	is cablecast.
	Microcomputer, 205,
	is preinformed of
	the
	time of
	cablecasting. When
	that time comes,
	microcomputer, 205,
	receives no
	program
	identification
	signals whatever
	from TV signal
	decoder, 203, which
	indicates that the
	set, 202, is not on.
	Microcomputer, 205,
	instructs signal
	processor, 200, to
	pass all program and
1	channel identifiers
	on all programing
	being cablecast on
	the multi-channel
	system. Signal
	processor, 200,
	receives
	this instruction
	from microcomputer,
	205, at its

Patented Claim	Pending Claim	Exr's Findings of Fact
		processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."
*		Co-ordinating Multimedia Presentations in Time

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Patented Claim	Pending Claim	Exr's Findings of Fact
		FIG. 6C can also illustrate how programing delivered at different times to one place can be coordinated to give a multimedia presentation at one time in one place.
		Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.
		Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.

Patented Claim	Pending Claim	Exr's Findings of Fact
		When the "Wall
		Street Week"
		transmission begins
		at 8:30 PM on a
		Friday evening,
		several instruction
		signals are
	·	identified by
		decoder, 203, and
		transferred to
		microcomputer, 205.
		These signals
	- v.	instruct
		microcomputer, 205,
		to generate
		several graphic
		video overlays,
		which microcomputer,
		205, has the means
		to
		generate and
		transmit and TV set,
		202, has the means
		to receive and
		display,
		and to transmit
		these overlays to TV
		set, 202, upon
	·	command.
		Subsequently in
		the program, the
1		host says, "Here is
		what the Dow Jones
		Industrials did is
		the
		past week," and a
		studio generated graphic is pictured.
		The host then says,
		"Here is what the
•		broader NASDAQ index
1		did in the week
L	<u> </u>	past," and a studio

Patented Claim	Pending Claim	Exr's Findings of Fact
		generated graphic overlay is displayed on top of the first graphic. Then the
		host says, "And here is what your portfolio did." At
		this point, an instruction signal is generated
		in the television studio originating the programing and
		is transmitted in the programing
·		transmission. This signal is identified by
		decoder, 203, and transferred via processor, 204, to
		microcomputer, 205. This signal instructs
		microcomputer, 205, to transmit the first overlay to TV
		set, 202, for as long as it receives the same
		instruction signal from processor, 204. The viewer
		then sees a microcomputer generated graphic of
		his own stocks' performance overlay the studio generated
		graphic. When the two studio generated graphics
	·	are no longer

Patented Claim	Pending Claim	Exr's Findings of Fact
		displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio. This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.